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ABSTRACT

This publication is a product of the knowledge development effort implemented under the Youth Employment and Demonstration Projects Act of 1977. It is the second volume of an assessment of the Job Corps, which found that, overall, the Job Corps experience of training young men and women for employment has been beneficial to society, although there is room for program improvements. This volume of the assessment focuses on the vocational training offered by the Job Corps. The study used the Job Corps' FY 1977 data base to examine the relationship of vocational offerings at different centers to the subsequent labor market experience of male and female trainees. Some of the findings of the study include (1) only one in seven corpsmembers who enter a vocational training cluster ends up completing and being placed in a job in the same cluster; those who do have the highest wages; (2) the overall job placement rate for male program completers (67.5 percent) was much higher than that for female completers (55.6 percent); (3) the average starting wage for males was higher than that for females; (4) for males, construction trades, clerical sales, and industrial production occupations provided the most success for completers, at least in the short run; (5) Civilian Conservation Centers had more success than contract centers with male completers; and (6) the four largest centers did relatively poorly in the rankings for male completers. The study has great implications for other types of training programs because of its large data base and the long duration of Job Corps programs. (KC)

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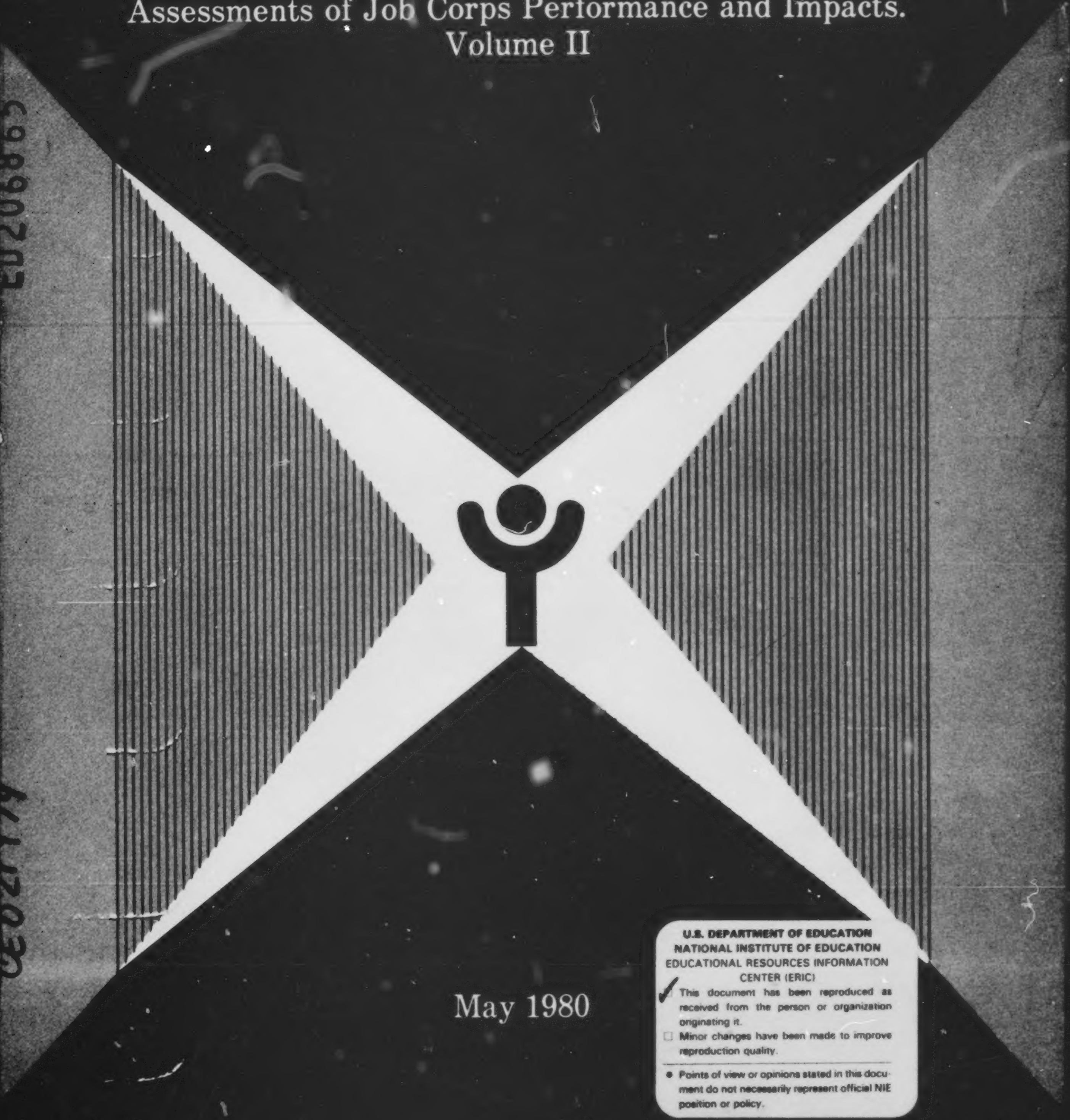
YOUTH KNOWLEDGE DEVELOPMENT REPORT

PROGRAM EVALUATIONS
Assessments of Job Corps Performance and Impacts.
Volume II



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YOUTH KNOWLEDGE DEVELOPMENT REPORT 3.3

ASSESSMENTS OF JOB CORPS
PERFORMANCE AND IMPACTS

Volume II

April 1980

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OVERVIEW

Job Corps has been labelled the "cornerstone" of youth employment and training efforts because it offers, in a residential setting, the most comprehensive, intensive and expensive services of any youth program, because it is targeted to those young persons with severest needs, because in over 15 years of operation it has served more than 600,000 young people, and because it is a program with a track record of proven success.

Job Corps is also a cornerstone of knowledge development efforts for several reasons:

First, Job Corps offers a complete treatment approach with corpsmembers receiving allowances, education, basic life skills training, vocational training, world-of-work experience, health care, residential support, work experience, counseling, recreation and more. Given the intensity of treatment, Job Corps constitutes a test of the most fundamental notion whether it is possible to redirect human lives and to make a difference over the long-term with comprehensive remedial assistance. The vast majority of CETA youth dollars, for instance, go for wages and salaries in work experience rather than for significant human resource development activities, so lifetime changes should not be expected for participants. Because Job Corps is relatively intensive and expensive, the benefits must be significant to justify the costs. Other less intensive programs may produce positive changes, but the marginal impacts cannot be discerned because our social science measurement tools are inexact. For instance, if the tools of measurement for social status changes have a margin of error of 5 percent, then a short-duration activity which produces positive but slight increments may not have measurable effects whereas Job Corps would be expected to produce more readily observable changes substantially exceeding the margins of error in measurement. The authorizing legislation for Job Corps, in fact, mandates benefit-cost analyses to determine whether the investment is justified. Put in another way, Job Corps is the most comprehensive of human resource investment programs for the disadvantaged. If it does not work, then there must be doubts about less comprehensive efforts.

Second, Job Corps is an excellent social laboratory in exploring ways to aid disadvantaged youth. It offers a complete range of services under standardized criteria in a multitude of settings to a relatively homogeneous, disadvantaged clientele. It is a nationally directed program. Hence, it is easier to try out various mixes of services and delivery approaches in Job Corps than in the decentralized CETA prime sponsor system. The program and its approaches have stablized after 15 years of operations so that learning curve and startup effects are minimized. There is a comprehensive recordkeeping system which provides information which is unavailable elsewhere and the size of the participant cohort permits detailed assessments of impacts.

Third, the Job Corps was the forerunner of many of the approaches now being adopted or considered for youth policies for the 1980s. Its program is self-paced, open-entry, open-exit, with multiple options and tracking of youth through a sequence of activities based upon individual ability. It provides benchmarks for achievement within Job Corps and resumes for subsequent entrance to the labor market. Education is linked to vocational training which is linked to work experienve. There are multiple steps so that advanced youth can go as far as college; in other words, there is a self-contained system which can move participants upward as rapidly as possible. The Job Corps experience, therefore, suggests how these features will or can work for economically disadvantaged youth under other CETA programs.

These two volumes on Assessments of the Job Corps Performance and Impacts present a massive array of studies ranging from rigourous impace and benefit-cost evaluations to surveys of nutrition in centers. In other words, this is a compendium of most of what has been learned about Job Corps in the 1970s but particularly since the youth initiatives were launched in 1977.

There are several major findings:

First, Job Corps apparently produces benefits to society in terms of increased earnings of participants, lowered transfer payments, and reduced crime, which exceed the costs. Human resource investments have a measurable impact and, apparently, a positive rate of return.

Second, the experience suggests that older youth who are more mature stay longer and tend to make significant employment and earnings gains subsequently while younger participants benefit from socialization and greater maturity.

Third, the self-paced individualized approach of Job Corps seems to work in education and vocational training. It is far from a perfect mechanism, but there is apparently much more choice and much less slippage in the realization of and progression through opportunities within Job Corps than outside.

Fourth, even though the characteristics of Job Corps participants have not changed significantly since the 1960s and continue to be extremely disadvantaged, there is a vast range in ability and motivation. A sorting occurs within Job Corps in terms of who initially applies, who stays and who advances. Where full opportunities are available for everyone, and where extra efforts are made for those with greatest difficulties, this sorting is helpful to the disadvantaged youth offering youth with commitment a chance to prove themselves.

Fifth, there is a delicate balance in Job Corps. The more elements in the treatment package, the more likely that the totality will impact on needs. For instance, health problems are less likely to impede progress of Corpsmembers than of participants of programs that do not offer comprehensive health care. However, with multiple components, it is also harder to make all the pieces function harmoniously. Job Corps experience suggests that it may take as long as five years of operation for centers to stabilize, i.e., that there is a long learning curve.

The Job Corps experience summarized in this volume is not all positive; there is much in the program which needs improvement. But the evidence is hopeful, suggesting that comprehensive services can help the most disadvantaged youth, and that the directions we are moving in youth policies for the 1980s make sense.

These volumes are products for the "knowledge development" effort implemented under the mandate of the Youth Employment and Demonstration Projects Act of 1977. The knowledge development effort consists of hundreds of separate research, evaluation and demonstration activities which will result in literally thousands of written products. The activities have been structured from the outset so that each is self-standing but also interrelated with a host of other activities. The framework is presented in A Knowledge Development Plan for the Youth Employment and Demonstration Projects Act of 1977, A Knowledge Development Plan for the Youth Initiatives Fiscal 1979 and Completing the Youth Agenda: A Plan for Knowledge Development, Dissemination and Application in Fiscal 1980.

Information is available or will be coming available from the various knowledge development activities to help resolve an almost limitless array of issues, but answers to policy questions will usually require integration and synthesis from a number of separate products, which, in turn, will depend on knowledge and availability of these products. A major shortcoming of past research, evaluation and demonstration activity has been the failure to organize and disseminate the products adequately to assure the full exploitation of the findings. The magnitude and structure of the youth knowledge development effort puts a premium on organization and dissemination.

As part of its knowledge development mandate, therefore, the Office of Youth Programs of the Department of Labor will organize, publish and disseminate the written products of all major research, evaluation and demonstration activities supported directly by or mounted in conjunction with the knowledge development effort. Some of the same products may also be published and disseminated through other channels, but they will be included in the structured series of Youth Knowledge Development Reports in order to facilitate access and integration.

The Youth Knowledge Development Reports, of which this is one, are divided into twelve broad categories:

1. Knowledge Development Framework: The products in this category are concerned with the structure of knowledge development activities, the assessment methodologies which are employed, validation of measurement instruments, the translation of knowledge into policy, and the strategy for disseminating findings.

2. Research on Youth Employment and Employability Development: The products in this category represent analysis of existing data, presentation of findings from new data sources, special studies on dimensions of youth labor market problems and policy analyses.

3. Program Evaluations: The products in this category include impact, process and benefit-cost evaluations of youth programs including the Summer Youth Employment Program, Job Corps, the Young Adult Conservation Corps, Youth Employment and Training Programs, Youth Community Conservation and Improvement Projects, and the Targeted Jobs Tax Credit.

4. Service and Participant Mix: The evaluations and demonstrations summarized in this category concern the matching of different types of youth with different service combinations. This involves experiments with work vs. work plus remediation vs. straight remediation as treatment options. It also includes attempts to mix disadvantaged and more affluent participants, as well as youth with older workers.

5. Education and Training Approaches: The products in this category present the findings of structured experiments to test the impact and effectiveness of various education and vocational training approaches including specific education methodologies for the disadvantaged, alternative education approaches and advanced career training.

6. Pre-Employment and Transition Services: The products in this category present the findings of structured experiments to test the impact and effectiveness of school-to-work transition activities, vocational exploration, job-search assistance and other efforts to better prepare youth for labor market success.

7. Youth Work Experience: The products in this category address the organization of work activities, their output, productive roles for youth and the impacts of various employment approaches.

8. Implementation Issues: This category includes cross-cutting analyses of the practical lessons concerning "how-to-do-it." Issues such as learning curves, replication processes and programmatic "batting averages" will be addressed under this category, as well as the comparative advantages of alternative delivery agents.

9. Design and Organizational Alternatives: The products in this category represent assessments of demonstrations of alternative program and delivery arrangements such as consolidation, year-round preparation for summer programming, the use of incentives and multi-year tracking of individuals.

10. Special Needs Groups: The products in this category present findings on the special problems of and adaptations needed for significant segments including minorities, young mothers, troubled youth, Indochinese refugees and the handicapped.

11. Innovative Approaches: The products in this category present the findings of those activities designed to explore new approaches. The subjects covered include the Youth Incentive Entitlement Pilot Projects, private sector initiatives, the national youth service experiment, and energy initiatives in weatherization, low-head hydroelectric dam restoration, windpower and the like.

12. Institutional Linkages: The products in this category will include studies of institutional arrangements and linkages as well as assessments of demonstration activities to encourage such linkages with education, volunteer groups, drug abuse agencies and the like.

In each of these knowledge development categories, there will be a range of discrete demonstration, research and evaluation activities, focused on different policy, program and analytical issues. For instance, all experimental demonstration projects have both process and impact evaluations, frequently undertaken by different evaluation agents. Findings will be published as they become available so that there will usually be a series of reports as evidence accumulates. To organize these products, each publication is classified in one of the twelve broad knowledge development categories, described in terms of the more specific issue, activity or cluster of activities to which it is addressed, with an identifier of the product and what it represents relative to other products in the demonstration. Hence, the multiple products under a knowledge development activity are closely interrelated and the activities in each broad cluster have significant interconnections.

The key elements in these two volumes are the 6-month followup study of Job Corps enrollees and a benefit-cost analysis based on these findings. The uncertainty is whether the positive short-term effects will continue or will be eroded over time. The Lasting Impacts of Job Corps Participation, also in the "program evaluations" category provides the results of the followup of Corpsmembers one year survey in this volume. It provides encouraging evidence that the overall gains do not erode.

The Job Corps approach might be contrasted with the work experience approach undertaken under the supported work demonstration with a similar client group and evaluated by parallel methodologies. Enhanced Work Experience - The Supported Work Approach for Youth in the "youth work experience" category provided an interesting contrast to the findings in these volumes. Likewise, Alternative Education Models--Preliminary Findings of the Job Corps Educational Improvement Effort in the "education and training approaches" category is related to the studies of education in Job Corps contained in these volumes. Employment and Training for Indochinese Youth in the "special needs group" category indicates the role of Job Corps in serving this significant segment of the disadvantaged youth population.

ROBERT TAGGART
Administrator
Office of Youth Programs

TABLE OF CONTENTS

REPORT NO.	TITLE	PAGE
	Overview	iii
11	Job Corps Vocational Offerings: An Analysis of Performance Indicators by Training Area and Center Performance	1
12	Assessment of Center Educational Programs in Job Corps	245
13	Job Corps World of Work Curriculum Needs Assessment and Recommendations for Curriculum Modification	313
14	New Policy Concerning Job Corps Pay and Allowances	347
15	Synopsis of the Findings of the Pay and Allowance Experiment	371
16	Report on the Job Corps Nutrition Survey	381
17	An Evaluation of a Pilot Weight Control	423
18	Evaluation Study of Job Corps Vocational Training Curricula	447

JOB CORPS VOCATIONAL OFFERINGS: AN ANALYSIS OF PERFORMANCE INDICATORS BY TRAINING AREA AND CENTER PERFORMANCE

FEBRUARY 1979

Joseph A. Hines
Brian Linder

OFFICE OF YOUTH PROGRAMS
REPORT NUMBER 11

TABLE OF CONTENTS

Overview 5

A. Introduction 9

B. Organization of the Study 10

C. The Reporting System 14

D. Job Corps Placement Wages 17

E. An Analysis of Vocational Offerings in Job Corps 18

  Cluster 01 - Subprofessional 23

  Cluster 02/22 - Clerical/Sales 25

  Cluster 03 - Service Occupations 29

  Cluster 04 - Forestry and Farming 31

  Cluster 05/25 - Food Service 33

  Cluster 06/26 - Automobile and Machinery Repair 37

  Cluster 07/27 - Construction Trades 41

  Cluster 08 - Electrical Appliance Repair 51

  Cluster 09 - Industrial Production 53

  Cluster 10 - Transportation 57

  Cluster 11 - Health Occupations 59

E. An Analysis of Center Variations Within Vocational Offerings . 63

  F.1 Center Variations for Cluster 01 68

  F.2 Center Variations for Cluster 02 69

  F.3 Center Variations for Cluster 03 71

  F.4 Center Variations for Cluster 04 73

  F.5 Center Variations for Cluster 05 74

  F.6 Center Variations for Cluster 06 79

  F.7 Center Variations for Cluster 07 85

  F.8 Center Variations for Cluster 08 89

  F.9 Center Variations for Cluster 09 90

  F.10 Center Variations for Cluster 10 92

  F.11 Center Variations for Cluster 11 93

Appendix

OVERVIEW

One of the major components of the Job Corps program is vocational training. Corpsmembers may choose training in a wide variety of occupations -- from office worker to cook to cement mason to inhalation therapist. Corpsmembers overwhelmingly gave positive ratings to the training they receive. The high placement rates of corpsmembers must, in part, be attributed to the vocational training they receive as part of the comprehensive Job Corps program.

Over the nearly 15 years of its existence, the Job Corps has done an unparalleled job in preparing young men and women to be productive, self-sufficient citizens. To maintain this level of achievement, Job Corps must continually access its training programs to insure that corpsmembers actively receive skills that are salable in today's labor market. New training programs are being developed in new high demand vocational areas -- solar energy technology, ship building trades and computer technology, to name a few. But the Job Corps must also continually examine its existing training programs to upgrade training techniques, keep pace with changes in occupations, and eliminate training in occupations for which there is low demand.

To aid in this examination, Job Corps maintains a comprehensive data base regarding the placement of enrollees. The study which follows makes use of the FY 1977 data base to take a look at the relationship of vocational offerings at different centers to the subsequent labor market experience of male and female trainees. Although the study examines an enormous amount of data it only begins to make full use of the Job Corps data base.

The study has importance not only because of the information it provides which can be used to improve Job Corps performance, but because of the implications for other vocational training efforts for youth. Most vocational training programs concentrate on the same general skill clusters and all seek to adjust these to supply and demand. Few other programs, however, have such a rich data system to compare outcomes to inputs. The experience of corpsmembers in various training clusters is probably reflective of the experiences of young trainees in other programs. Certainly, the analysis can help to identify the best and worst training areas.

The following points highlight some of the findings of the study.

- Only one in seven corpsmembers who enters vocational training cluster ends up completing and being placed upon termination in a job in the same cluster; those who do have by far the highest wages. This fact reflects the high dropout rates experienced in all youth programs, the subsequent alternatives to work such as education or child-rearing, the difficulties of finding job-training markets for young people, and their frequent career goals changes. This would suggest that training must be considered in terms of the multiplicity of options it provides as well as its impacts on overall rather than specific skills.

- The overall job placement rate for male program completers (67.5 percent) was much higher than that for female completers (55.6). This was true as well for each of the vocational clusters except for the forestry, farming, and gardening cluster. However, female completers who were placed tended to have a higher rate of success in getting jobs in the vocation for which they were trained than did their male completers.

- The average starting hourly wage for male completers who were placed in jobs for which they had been trained was $3.57 as compared to $2.92 for women. Interestingly, men tended to have much higher job training match wages than women in what could be considered traditionally female occupational clusters. For example, the average hourly wage for males trained and placed in clerical/sales occupation was $3.99

compared to $2.98 for women. Further, the average wage for males in health occupations was $2.81 compared to $2.57 for females. Conversely, women trained in some traditionally male occupations had higher placement wages than their male counterparts. This is true for construction trades ($4.81) and forestry, farming and gardening. However, both men and women tend to be trained in occupations "traditional" for their sex.

- For males, construction trades, clerical sales, and industrial production occupations provided the most success for completers, at least in the short run.

- In the ranking system used in the study, Civilian Conservation Centers tended to rank higher than contract centers in terms of the success of male completers. This can be ascribed to the highly successful union construction training which was at the time offered primarily to CCC's.

- The four largest centers did relatively poorly in the rankings for male completers.

The summary findings of the study are interesting to the general analyst. However, the detailed occupation by occupation listings by center and sex in the appendix should also be of value to Job Corps managers at the national, regional, and center levels who must make decisions about future Job Corps vocational training.

ROBERT TAGGART
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Office of Youth Programs

A. INTRODUCTION

Job Corps is probably the most studied of all manpower programs. One reason for this is the large computerized data base maintained by the Job Corps National Office in support of Job Corps operations. Because this data base is readily available to the researcher, no other manpower program has such a wealth of information so close at hand. At the same time, however, there are large gaps in the body of knowledge about the program. Studies done ten years ago in 1968 cannot be considered to be accurate today. The Job Corps program has changed drastically since the days of the Great Society,and it has largely been out of the public eye for the past six or seven years. With the Carter Administration's mandate to double the size and improve the quality of Job Corps, it is apparent that interest in the program by the research community will increase.

This study is not intended to be the last word on the subject. Rather, it is meant to be the first in what is planned to be an annual series of studies on the vocational offerings of Job Corps. It does not include all the many variables affecting the success of graduates of the many types of vocational training offered by the program. Instead, it is a basis for more comprehensive research.

Many factors affect the retention and subsequent placement of Job Corps graduates and their starting wages. The corpsmembers' basic skills and capabilities, their ages and sex, the center's environment, the instructors' capabilities, the specific occupations, the general economic condition of the area to which the corpsmembers return, the specific market for the corpsmembers' skills, and the dedication and skill of placement staff, all play a part. This study does not attempt to assess these factors. Rather, the study attempts to use Job Corps' internal vocational reporting system to describe what is (or rather was) in FY 1977.

Certain caveats are in order. First, no implication is intended about the quality of training at any given center. As noted, placement of Job Corps graduates is influenced by a variety of factors, of which center performance is only one. No recent study has been done to weight or evaluate such factors. In addition, it is a truism in Job Corps that nothing remains constant about the program but its basic mission. Center environments change; programs are added or dropped; economic conditions vary; the geographic areas providing input to a given center shift. Although the relative effectiveness of various occupational training remains basically constant from year to year, data can pinpoint issues which need further attention even though some corrective actions may already have occurred.

B. ORGANIZATION OF THE STUDY

This study focuses on the following areas:

1. The success of male and female graduates of each vocational offering

2. The success of each center's graduates in specific vocations

3. Performance of contract centers versus Civilian Conservation Centers for males by vocational cluster

The basic mode of comparison is a set of indicators, each of which is explained below.

% Cat I: Percentage of Category I Terminees.

A Category I terminee is defined as a corpsmember who has been certified by the center director as completing a course of study. A Category II termination is a corpsmember who has been in the program more than 90 days, but who did not complete the prescribed course of study for a vocation. A Category III termination is a corpsmember who terminated from the program after being in Job Corps 90 days or less. The ratio of Category I to all terminees from the vocational cluster is equivalent to a completion rate. This may indicate the attractiveness of the offering, the types of students who are attracted, the ease of completion, or other factors. However, since Category I terminees have substantially greater subsequent employment and earnings than Category II and III terminees, the completion rate is, on the average, a success indicator.

# Cat I: Number of Category I terminees for a particular vocational cluster-subcluster/center, etc.

#Placed: Number of Category I terminees placed in a job, whether or not the job was training related.

%Placed: The percent of Category I terminees placed in a job, i.e., #placed ÷ # Cat I x 100. This indicator shows the success of Category I terminees from a cluster/vocation in obtaining employment after graduation. Such factors as local labor market conditions, the age and sex of the graduate, the quality of service provided by placement agencies have an influence on the indicator.

#JTM: The number of Category I terminees who were placed in the same type of job for which they were trained (job training match).

It is important to note that when this indicator is shown for a vocational cluster, i.e., a group of related occupations, a job training match is reported if the corpsmember is placed in any subcluster (specific occupation) within the group. When shown for a subcluster, the job training match will be for only that subcluster. Therefore, the sum of the #JTM for all the subclusters in a cluster may well be less than the #JTM shown for the cluster.

%JTM: Category I terminees placed with a job training match as a percentage of Category I terminees placed, i.e., #JTM ÷ # placed x 100. The same relationship of cluster to subcluster applies here as it did under #JTM. This indicator shows the success of graduates in obtaining training related jobs. Because of the cost of vocational training and other such factors, a high %JTM is desirable. A low %JTM may indicate poor training, or training mismatched to labor market demands.

P/JTM Rate: (Placement/JTM Rate)

The ratio of Category I job training matches to Category I terminations, i.e., #JTM ÷ #CAT I or, expressed differently, % placed (expressed as a ratio) x %JTM (expressed as a ratio). This indicator shows the relative success of Category I terminees in getting training related jobs. Because one of the main aims of Job Corps vocational training is to prepare young people to get a good job, a high P/JTM rate can be considered a success indicator.

JTM Wage: The average starting hourly wage for those Category I terminees who had a job training match. Within a cluster, variations in this indicator will be most dependent on local labor market wages and whether the job is union or not. For comparisons among clusters, the JTM wage shows the relative quality of the jobs in monetary terms.

Collectively, these items are referred to as "the indicators." Note that the indicator "% Cat I" is only used at the cluster level, and thus does not appear in the vocational cluster/subcluster according to center listings.

In addition to the indicators displayed above, a limited system of rankings is used. This ranking system must be viewed with caution. As noted earlier, no evaluation of individual centers is intended nor should any be inferred. The rankings are intended to show how the relative placement success of a center's or occupation's graduates is influenced by a variety of factors such as labor market conditions and the placement agencies used. Basically, the rankings are composed of four equally weighted factors: % Cat I, % Placed, % JTM, and JTM Wage. The P/JTM rate is not used, because it is derived from two other indicators, % Placed and % JTM, and is thus reflected indirectly in the rankings.

C. THE REPORTING SYSTEM

The primary source of data for this study is the Job Corps Placement System. Throughout this report, it will be emphasized that the data was reported in FY 1977. While this is true, a further explanation is necessary. Until FY 1978, placement agencies had an unlimited amount of time to report placements. (Placement agencies now have one year to report placements.) Thus, the FY 1977 report shows a few placements for centers which have been closed for some time, e.g., Poland Springs and Lydick Lake. Therefore, some of the activity reported in FY 1977 probably occurred in FY 1976 or earlier. However, the totals for terminees of various types are very close to those known to be true for FY 1977.

The vocational analysis computer printouts for FY 1977 separately identify union programs. Union programs are prefixed in the reporting system by "2" in the cluster number (e.g., 27, Union Construction Trades; 07, Nonunion Construction Trades). However, this designation was not implemented until mid-FY 1977. Therefore, union data for the first half of the fiscal year are reported under the nonunion cluster code. Because the discreet union data are incomplete, they have been combined for the purposes of this study with "nonunion" data (which include some union data), so that all data for an occupation are displayed together. Of course, centers with union occupational training are monitored by Job Corps staff.

Some centers operate both union and nonunion components for the same occupation (e.g., carpenter, construction) due to minimum age requirements for union programs and other factors. Therefore, union data cannot be "backed out" of the nonunion data based on identifying which centers have union programs in specific occupations. This is frustrating to the researcher, because it is obvious that, although union programs are relatively expensive, they have a tremendous effect on the placement of Job Corps graduates in good paying jobs.

An examination of preliminary data for FY 1978 indicates that the separate reporting of union and nonunion data is occurring as planned. Hopefully a study of FY 1978 data will be able to make use of this data. In addition, the FY 1978 study would reflect less of a "pipeline" effect because of the one-year time limit on reporting placements and increased monitoring to insure that data are input to the system promptly. A further complication to the reporting of union data is that graduates of the two union extension centers, Santa Rosa and Minnesota, are generally reported by the various regular centers which provided the corpsmembers to the extension centers.

One final word is needed about the reporting system. In the section which displays vocational clusters/subclusters by center, the center name is preceded by a three-digit center designator. Some centers, e.g., San Jose, have more than one center designator code to identify residential, nonresidential, and other components for reporting purposes. In those instances where centers are prefixed by a center designator code, it is possible that center will be listed more than once. In those instances where no center designator code is listed, it is assumed that the various center components have been combined.

D. JOB CORPS PLACEMENT WAGES

The following table shows the average wages for Job Corps placements for all corpsmembers by cluster and termination category.

AVERAGE HOURLY WAGES

Cluster	All Placements	Cat III Placements	Cat II Placements	Cat I Placements	Cat I Placements W/JTM
1	$2.70	$2.54	$2.61	$3.02	$3.19
2	2.81	2.57	2.60	3.09	3.21
3	2.55	2.42	2.52	2.72	2.81
4	2.52	2.41	2.47	2.77	3.31
5	2.49	2.35	2.38	2.78	-
6	2.88	2.59	2.75	3.11	2.89
7	3.52	2.96	3.04	4.00	4.02
8	2.95	2.81	2.99	2.99	2.71
9	3.03	2.82	2.89	3.76	3.48
10	2.82	2.68	2.71	3.24	2.16
11	2.58	2.47	2.54	2.61	2.59
12*	3.02	2.89	3.03	3.32	-

* (Unassigned)

In general, the better the termination category, the higher the placement wage. Of particular note is the difference in placement wage in Cluster 7, Construction Trades, between Category II ($3.04) and Category I ($4.00). One explanation for this stems from the heavy involvement of unions in this cluster. Unions which provide apprenticeships to Job Corpsmembers do so generally only to Category I terminees of a union subcluster. These apprenticeships usually have a higher placement wage than other Job Corps occupations.

Also worthy of note are the five clusters, No. 6 - Automobile and Machine Repair; No. 8 - Electrical Appliance Repair; No. 9 - Industrial Production; No. 10 - Transportation; and No. 11 - Health Occupations, for which the JTM wage for Category I terminees is lower than the overall placement wage for all Category I terminees from the cluster. This would suggest that training in these clusters provides entry for completers into other job areas with more attractive earnings. This would certainly be expected to influence the percentage of placements with a training match.

E. AN ANALYSIS OF VOCATIONAL OFFERINGS IN JOB CORPS

This section of the study analyzes the vocational subclusters for which graduates were reported in FY 1977. A discussion of center variations within vocational clusters is presented in section G. A complete listing of indicators by center, by sex, and by cluster and subcluster is presented in the appendix.

A question that is often debated by those associated with Job Corps is: What kinds of jobs should we be training corpsmembers for? The answer probably is: It depends. Corpsmembers are not a homogeneous group by any means, coming from different parts of the country, with different aptitudes and interests. For some corpsmembers, entrance into the most "entry level" of entry level jobs is an accomplishment. For other corpsmembers, such minimum skill level training is far below their capabilities. It is almost intuitively obvious that no one type of occupation is best for all, or even most, corpsmembers. Indeed, for many corpsmembers, vocational training as an end in itself may not be the best course at all. For such, the college program was developed. However, even college-bound corpsmembers benefit from the skills and disciplines gained from vocational training.

Even though data for union programs provided through the placement system are incomplete, it is apparent that the union programs are more successful in placement effectiveness than nonunion programs, though at a much greater monetary cost.

On the downside, a few occupations are cause for concern. Baker and Diesel Mechanic, for example, are occupations which graduates had difficulty getting into; even though these were trades for which they were trained. Service Station Attendants, Nurse's Assistants, and Orderlies are occupations which are also poor performers.

In the analysis that follows, an attempt is made to compare the relative successes of male and female corpsmembers. It is obvious from the data that males fare far better than their female counterparts. There are, no doubt, complex reasons for this. At the very least, the Job Corps centers which are predominantly female continue to offer "traditional" female occupations. It will remain for future analysts to examine how the situation is affected by coeducation and the extent to which female enrollees select training in nontraditional occupations.

The following tables will show a summary of each cluster for male graduates, female graduates, and all graduates. Also presented is a table which ranks clusters.

Table A-1 shows the cluster names and numbers of the Job Corps Vocational clusters.

VOCATIONAL CLUSTER NAMES AND NUMBERS

TABLE A-1

Cluster Number	Cluster Name
1	Sub-professional
2	Clerical and Sales
3	Service Occupations
4	Forestry, Farming, and Gardening
5	Food Service
6	Automotive and Machine Repair
7	Construction Trades
8	Electrical/Appliance Repair
9	Industrial Production
10	Transportation
11	Health Occupations
12	Miscellaneous Occupations/Unassigned

For purposes of this study, the few Category I terminations reported from Cluster 12 are assumed to be due to reporting error and have been ignored.

Tables A-2, A-3, A-4 display the indicators for each vocational cluster for male graduates, female graduates and all graduates, respectively.

TABLE A-2

MALE

Cluster	% Cat I	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
1	62.5	80	43	53.8	18	41.9	.225	3.35
2	38.0	317	214	67.5	149	69.6	.470	3.99
3	31.9	655	413	63.1	211	51.1	.322	2.84
4	49.3	184	132	71.7	79	59.9	.429	3.28
5	40.0	990	634	64.0	384	60.6	.388	-
6	29.1	1,288	828	64.3	404	48.8	.314	2.88
7	37.1	3,018	2,124	70.2	1,401	66.0	.464	4.01
8	39.3	161	111	68.9	37	33.3	.230	2.71
9	41.8	1,193	832	69.7	540	64.9	.453	3.52
10	28.6	64	45	70.3	21	46.7	.328	3.38
11	42.4	103	63	61.2	45	71.4	.437	2.81
TOTAL MALE	36.5%*	8,078	5,453	67.5%	3,290	60.3%	.407	3.57

*Excludes Cluster 12.

TABLE A-3

FEMALE

Cluster	% Cat I	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
1	29.1	65	27	41.5	10	37.0	.154	2.91
2	34.7	1,320	738	55.9	499	67.6	.378	2.98
3	37.4	77	41	53.2	18	43.9	.234	2.47
4	56.1	32	24	75.0	14	58.0	.438	3.45
5	33.5	251	128	51.0	87	68.0	.347	-
6	27.6	32	14	43.8	5	35.7	.156	3.67
7	24.4	69	44	63.8	26	59.1	.377	4.81
8	20.8	5	2	40.0	-	-	-	-
9	39.2	227	122	53.7	62	50.8	.273	3.17
10	40.8	29	17	58.6	10	58.8	.345	2.69
11	42.7	1,159	658	56.8	453	68.8	.391	2.57
TOTAL FEMALE	37.3%*	3,286	1,828	55.6%	1,194	65.3%	.363	2.92

*Excludes Cluster 12.

TABLE A-4

TOTAL

Cluster	% Cat I	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
1	41.3	145	70	48.3	28	40.0	.193	3.19
2	35.3	1,637	952	58.2	648	68.1	.396	3.21
3	32.4	732	434	62.0	229	50.4	.313	2.81
4	50.2	216	156	72.2	93	59.6	.431	3.31
5	38.5	1,241	762	61.4	471	61.8	.380	-
6	29.0	1,320	842	63.8	409	48.6	.310	2.89
7	36.7	3,087	2,168	70.2	1,427	65.8	.462	4.02
8	38.2	166	111	68.9	37	33.3	.230	2.71
9	41.4	1,420	954	67.2	602	63.1	.424	3.48
10	31.5	93	62	66.7	31	50.0	.333	3.16
11	42.7	1,262	721	57.1	498	69.1	.395	2.59
TOTAL	36.7%*	11,364	7,281	64.1%	4,480	61.5%	.394	3.40

*Excludes Cluster 12

Table A-5 shows the rankings for each cluster. These rankings were devised by averaging the rankings for each cluster of four variables: % Cat I, % Placed, % JTM, and JTM Wage. Each variable received an equal weight. Cluster 5 was ranked on the first three variables only, as JTM wage was omitted.

TABLE A-5

RANKING OF VOCATIONAL CLUSTERS

Cluster Number	Cluster Name	Male Rank	Female Rank	Total Rank
1	Sub-professional	10	10	9
2	Clerical and Sales	4	5	4
3	Service Occupations	11	8	10
4	Forestry, Farming, and Gardening	1	1	1
5	Food Service	6	7	6
6	Automotive and Machine Repair	8	9	11
7	Construction Trades	1	3	2
8	Electrical/Appliance Repair	8	11	7
9	Industrial Production	1	6	2
10	Transportation	7	4	7
11	Health Occupations	5	2	4

CLUSTER 01 - SUBPROFESSIONAL

The 145 completers from Cluster 01 (80 men and 65 women) represented 1.3% of all Category I terminees reported in FY 1977. The 145 completers were 41.3% of all terminations from the cluster during FY 1977.

TABLE 01-1

01 - SUBPROFESSIONAL

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL							
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
01	145	70	48.3%	28	40.0%	.193	3.19
01 Versus All Clusters	1.3%	1.0%	-15.8%	0.7%	-21.5%	-.201	-.21
MALE							
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	$3.57
01	80	43	53.8%	18	41.9%	.225	3.35
01 Versus All Clusters	1.0%	0.8%	-13.7%	0.6%	-18.4%	-.182	-.22
FEMALE							
All Clusters	3,286	1,828	55.6%	1,194	65.3%	.363	$2.92
01	65	27	41.5%	10	37.0%	.154	2.91
01 Versus All Clusters	2.0%	1.5%	-15.1%	0.8%	-28.3%	-.209	-0.01

Thus, while the % placed, % JTM, and P/JTM rate indicators are either the lowest or second lowest of all clusters, for men, women and combined, the JTM wage is only slightly lower than average, and the $2.91 wage for women is very close to the $2.92 average for all female Category I terminees.

Although the cluster includes several more or less unrelated occupations, this analysis will focus on two: draftsman and cosmetologist. Table 01-2 shows the indicators for subcluster 01-A draftsman.

TABLE 01-2

01-A, DRAFTSMAN

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Males	22	10	45.5%	5	50.0%	.227	$3.50
Females	46	16	34.8%	3	18.8%	.065	$2.91
TOTAL	68	26	38.2%	8	30.8%	.117	$3.28

Thus, with the exception of JTM wage, the indicators for this subcluster are far below the Job Corps average.

Table 01-3 shows the indicators for subcluster 01-C, Cosmetologist.

TABLE 01-3

01-C, COSMETOLOGIST

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
01-C, Male	4	3	75.0%	1	33.0%	.250	$3.50
01-C, Female	17	7	41.2%	2	28.6%	.118	$2.40
01-C, TOTAL	21	10	47.6%	3	30.0%	.143	$2.76

As with 01-A, this subcluster has very poor indicators.

CLUSTER 02/22 CLERICAL/SALES

The 1,637 Category I terminees from the cluster represented 14.4% of all Category I terminations reported during FY 1977. The 317 male category terminees were 3.9% of all male completers reported during the year. The 1,320 female completers were 40% of all female completers reported during the year. This cluster produced the most Category I female terminees of any single cluster.

Table 2-1 displays the indicators for the cluster as compared to those for all other clusters and the total for all clusters.

TABLE 2-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 02/22	1,637	952	58.2%	648	68.1%	.396	3.21
All Other Clusters	9,727	6,329	65.1%	3,832	61.4%	.394	3.43
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	3.40

Thus, the relatively higher % placed and lower % JTM for the cluster net out to a P/JTM rate that is nearly equal to that for all other clusters. The JTM wage, however, is $0.22 lower than the average for all other clusters.

Table 2-2 displays the indicators for Cluster 2 male completers, for male completers from all other clusters, and for all male completers.

TABLE 2-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 2 (M)	317	214	67.5%	149	69.6%	.470	3.99
All Other Clusters (M)	7,761	5,239	67.5%	3,141	60.0%	.405	3.55
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	3.57

It is interesting to note that for men, Cluster 2 has the highest P/JTM rate of all clusters and that a JTM wage of $3.99 an hour is only $.03 less than that of Cluster 7 (construction trades), the cluster with the highest wage.

Table 2-3 displays the indicators for Cluster 2 female completers, for female completers from all other clusters, and for all female completers.

TABLE 2-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 2 (F)	1,320	738	55.9%	499	67.6%	.378	2.98
All Other Clusters (F)	1,966	1,090	55.4%	695	63.8%	.354	2.88
All Clusters	3,286	1,828	55.6%	1,194	65.3%	.363	2.92

Thus, Cluster 2 female completers have indicators which are about the norm for female completers. However, referring back to table 2-2, men do considerably better than women, especially in terms of JTM Wage.

Cluster 2 is composed of a great many related occupations. It is apparent that there is a great deal of transferability among these occupations as far as placement is concerned. Recalling that a cluster JTM relates to placement within a cluster and a subcluster JTM relates to placement only within a subcluster, the Cluster 2 % JTM for women is 67.6% while the composite subcluster % JTM for women within Cluster 2 is only 46%. This indicates that women trained in one clerical subcluster who are placed within the cluster are placed in another clerical subcluster about one-third of the time. Given this, the question must be asked about why so many specific types of clerical training are offered. Is there really all that much difference between a bookkeeper and an accounting clerk?

The single largest subcluster for both men and women, comprising 38.8% of all Cluster 2 completers, is Subcluster 2A, Clerk Typist. Table 2-4 displays the indicators for this subcluster.

TABLE 2-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
2A (M)	112	75	67.0%	47	62.7%	.420	4.16
2A (F)	523	286	54.7%	151	52.8%	.289	3.05
2A (T)	635	361	56.9%	198	54.9%	.312	3.31

Note that males in the subcluster fared much better than females on all counts, especially in JTM Wage. To further explore this phenomenon, table 2-5 compares males and females in the subcluster who trained at the same centers.

TABLE 2-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Males	93	63	67.7%	39	61.7%	.419	$4.40
Females	332	184	54.7%	78	48.3%	.268	$3.18

Thus, a comparison of male and female completers from the same centers shows very nearly the same disparities.

In Cluster 2, a subcluster 2-D, Keypunch Operator, has the best indicators. These are shown in table 2-6.

TABLE 2-6

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
2D (M)	21	18	85.7%	14	77.8%	.667	$4.30
2D (F)	118	71	60.2	43	60.6	.364	3.49
2D (T)	139	89	75.4%	57	64.0%	.410	$3.69

Of the other subclusters in Cluster 2, only a passing mention will be made. They are nearly all characterized by low % Placed, low % JTM, and low JTM Wages.

CLUSTER 03 - SERVICE OCCUPATIONS

Cluster 03 with 732 Category I terminations represented 6.4% of all Category I terminations reported in FY 1977. The 655 males were 8.1% of all male completers, and the 77 females were 2.3% of all female completers. During the year, 32.5% of all terminations from the cluster were completers (38% for males and 34.7% for females). The Civilian Conservation Centers tended to have very low completion rates, 23.4%, on the average. Virtually all of the activity by CCCs in this cluster was in subcluster 03-B, Custodial Maintenance.

Table 03-1 shows the indicators for the cluster compared to all clusters.

TABLE 03-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Males 03	655	413	63.1%	211	51.1%	.322	2.84
Females 03	77	41	53.7%	18	43.9%	.234	2.47
TOTAL	732	434	62.0%	229	50.4%	.313	2.81

Thus, while the "% placed" was near the Job Corps Category I average, the % JTM and JTM Wage were well below the average.

Most of the Category I terminees in the cluster and nearly all male CAT Is were in subcluster 03-C, Custodial Maintenance. Table 03-2 shows the indicators for all males, males from CCCs and the total for the subcluster.

TABLE 03-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Males 03-B	634	398	62.8%	162	40.7%	.256	2.84
CCC 03-B	217	142	65.4%	55	38.7%	.253	2.95
TOTAL	645	406	62.9%	167	41.1%	.259	2.85

NOTE: Male 03-B and CCC 03-B are not mutually exclusive and will not equal the total, which includes females.

Although the subcluster has average placement rates, the % JTM is very low, as is the JTM Wage. Although CCCs have better indicators for Category I terminees, Table 3-1 showed that the completion rate for this subcluster for CCCs is very low.

The other significant 03 subcluster is 03-K, Nursery School Teacher, primarily for women. Table 03-3 shows the indicators for this subcluster.

TABLE 03-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	47	23	48.9%	7	30.4%	.149	2.31

This is not indicative of Job Corps' best offerings.

CLUSTER 04 - FORESTRY AND FARMING

All Category I terminees and virtually all other terminees in this cluster appear in two subclusters. Activity for 04-B, Nursery Worker, occurred primarily at contract centers. Activity for 04-C, forestry and conservation worker, was primarily at Civilian Conservation Centers. Cluster 04 produced about 5% of all Category I terminees reported in 1977. For the cluster as a whole, the key indicators were as follows (compared to the indicators for all clusters).

TABLE 4-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Male-04	184	132	71.7%	79	59.9%	.429	$3.28
Female-04	32	24	75.0%	14	58.0%	.438	3.45
Total-04*	216	156	72.2%	93	59.6%	.431	3.31
Male-All	8,078	5,153	67.5%	3,290	60.3%	.407	3.57
Female-All	3,286	1.828	55.6%	1,194	65.3%	.363	2.92
Total-All	11,364	7,281	64.1%	4,480	61.5%	.394	3.40

* Cat I placement wage equals $2.77.

Category I terminees represented 50% of all terminees reported for the cluster. For males, the completion rate was 49.3% and for females, 59.7%.

The following comparison of the two subclusters is striking.

TABLE 04-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Male 04-B	64	33	51.6%	8	24.2%	.175	$2.62
Female 04-B	17	10	58.8%	7	70.0%	.412	2.56
TOTAL 04-B	81	43	53.1%	15	34.9%	.185	$2.59
Male 04-C	119	98	87.4%	65	66.3%	.546	$3.30
Female 04-C	15	14	93.3%	6	42.9%	.400	4.06
TOTAL 04-C	134	112	83.6%	71	63.4%	.530	$3.36

Table 04-2 shows that graduates of 04-B were far less likely to be placed than those of 04-C; that they were far less likely to be placed in jobs for which they were trained; and that they were placed in jobs at far lower wages.

CLUSTER 05/25 - FOOD SERVICE

The 1241 Category I terminees from the cluster represented 10.9% of all completers reported during FY 1977. The 990 male completers represented 12.3% of all male completers while the 251 female completers represented 7.6% of all female completers reported during the year. The completion rate for the cluster was 38.5% (40% for males and 33.5% for females).

Table 5-1 shows the indicators for the cluster as compared to all clusters.

TABLE 5-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 5 (T)	1,241	762	61.4%	471	61.8%	.380	INA
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
Difference			-3.7%		+0.3%	-.014	

Cluster 5 is very close to the Job Corps-wide indicators for Category I terminations.

Table 5-2 displays the indicators for male completors from Cluster 5 as compared to those for all male completers.

TABLE 5-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 5 (M)	990	634	64.0%	384	60.6%	.388	-
All Clusters (M)	8,078	5,453	67.5%	3,290	60.3%	.407	
Difference			-3.5%		+0.3%	-.019	

Although the placement rate for males is slightly lower for the cluster, the indicators are close to the Job Corps average for males.

Table 5-3 displays the indicators for female completers from Cluster 5 as compared to those for all female completers.

TABLE 5-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 5 (F)	251	128	51.0%	87	68.0%	.347	-
All Clusters (F)	3,286	1,090	55.4%	695	63.8%	.354	-
Difference			-4.4%		+4.2%	-.007	

Thus, the relatively lower placement rate for the cluster and the relatively high JTM rate net out to a P/JTM rate which approaches that rate for all female completers in Job Corps.

Table 5-4 shows the indicators for subcluster 5A, Waiter/Waitress.

TABLE 5-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
5A (M)	15	11	73.3%	7	63.6%	.467	-
5A (F)	23	17	73.9%	12	70.6%	.521	-
TOTAL	38	28	73.7%	19	67.9%	.500	-

Although this subcluster has high indicators, it is impossible to determine the JTM Wage given the manner in which most waiters are paid, i.e., wages and tips.

By far the largest subcluster in Cluster 5 is 05-B, Cook. Table 5-5 displays the indicators for the subcluster.

TABLE 5-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
5B (M)	650	419	64.5%	223	53.2%	.343	-
5B (F)	61	35	57.4%	17	48.6%	.279	-
5B (T)	711	454	63.9%	240	52.9%	.338	-

The indicators for this subcluster are lower across the board than the Job Corps average.

Table 5-6 shows the indicators for subcluster 05-C/25-C, Baker. Because the number of centers is small relative to the number of completers, all centers with completers will be listed.

TABLE 5-6

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	212	115	54.3%	36	31.3%	.169	$2.64

Only a little more than half of the graduates of the subcluster were placed, and less than one-third of these got jobs as bakers.

CLUSTER 06/26 - AUTOMOBILE AND MACHINERY REPAIR

The 1,320 Category I terminees from this cluster represent 11.6% of all completers reported in FY 1977. The 1,288 males represented 15.9% of all male completers, while the 32 females represented only about 1% of all female completers reported during the year. The completion rate of 29% (29.1% for males and 27.6% for females) was the lowest of any clusters.

Table 6-1 displays the indicators for the cluster as compared to all clusters.

TABLE 6-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 6 (T)	1,320	842	63.8%	409	48.6%	.310	$2.89
All Clusters (T)	11,364	7,781	64.1%	4,480	61.5%	.394	3.40
Difference			-0.3		-12.9	-.084	-0.51

Although the placement rates for the cluster were virtually the same as for all clusters, the JTM rate was 12.9 percentage points below the Job Corps average, while the JTM wage was $0.51 an hour less than the Job Corps average.

Table 6-2 displays the indicators for male completers from the clusters as compared to all male completers.

TABLE 6-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 6 (M)	1,288	828	64.3%	404	48.8%	.314	$2.88
All Clusters (M)	8,078	5,453	67.5%	3,290	60.3%	.407	3.57
Difference			-2.8		-11.5	-.093	-0.69

As with the comparison with all Category I terminees, male completers from the cluster were placed at about the same rate as all male completers, but the JTM rate was 11.5 percentage points lower for Cluster 6 male completers than for all completers, and the JTM wage was $0.69 an hour lower.

It is interesting to note that, unlike Cluster 2, there is relatively little transferability between occupations within the cluster, considering the similar skills offered by the various subclusters. The JTM rate for males for the cluster is 48.8% (reflecting a JTM for any occupation within the cluster). However, the composite JTM for the subclusters is 42.1% reflecting only a 6.7 percentage point difference.

Table 6-3 displays the indicators for subcluster 6A, Auto Mechanic Helper.

TABLE 6-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	258	170	68%	68	40%	.264	$2.77

With the exception of % placed, the indicators are much lower than the Job Corps average.

Table 6-4 displays the indicators for subcluster 6B, Auto Service Repair.

TABLE 6-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
6B (M)	421	272	64.6%	128	47.1%	.303	$2.91
6B (F)	7	4	57.1%	1	25 %	.143	3.00
6B (T)	428	276	64.5%	129	46.7%	.301	2.91

Table 6-5 displays the indicators for two small subclusters: 6C, Farm Truck Equipment, and 6D, Small Gas Engine Repair.

TABLE 6-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
6C (M)	18	12	66.7%	2	16.7%	.111	$3.00
6D (M)	22	14	63.6%	5	35.7%	.227	2.88

Note that the placement rates are average but that the JTM is very low for both occupations.

Table 6-6 displays the indicators for subcluster 6E, Auto Body Repairman, for the total cluster and key centers.

TABLE 6-6

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	290	195	67.2%	99	50.8%	.341	$2.[illegible]3

Table 6-7 displays the indicators for the remaining, relatively small subclusters in Cluster 06/26.

TABLE 6-7

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
6F (M)	37	18	48.6%	10	55.6%	.270	$3.15
6H (M)	39	23	59.0	5	21.7	.128	2.67
6K (M)	1	0	.0	-	-	-	-
6L (M)	5	4	80.0	1	25.0	.200	[illegible].00
6N (M)	64	38	59.4	4	10.5	.063	4.79
6O (M)	1	1	100.0	1	100.0	1.000	2.55
6P (M)	1	1	100.0	-	-	-	-
6R (M)	11	6	54.5	3	50.0	.273	3.44
6X (M)	81	59	72.8%	12	23.5%	.198	$8.89

Subcluster 6F, Auto Parts Clerk, is characterized by low placement (48.6%) and only slightly better JTM (55.6%).

Subcluster 6N, Diesel Mechanic, had one of the lowest JTM rates (105%) and P/JTM rates (.063) of any occupation reviewed. Only Jacobs Creek did well. The 26 Atterbury graduates did not have a single JTM.

TABLE 6-8

		#Cat I	#Placed	%Placed	#JTM	%JTM	P/JTM Rate	JTM Wage
07F/27F	T	261	169	64.8%	76	45%	.291	$4.93
07G	T	2	0	-	-	-	-	-
07H	T	61	35	57.4	11	31.4	.180	3.12
07I	T	115	91	79.1	60	65.9	.522	3.04
07J	T	1	1	100.0	1	100.0	1.000	3.00
07K	T	83	49	59.0	24	49.0	.289	4.22
07L/27L	T	261	171	65.5	83	43.5	.318	3.81
07x/27x	T	237	186	78.5%	100	53.8%	.422	$3.70

CLUSTER 07/27 - CONSTRUCTION TRADES

The 3,087 Category I terminees from cluster 07/27 represented 27.2% of all completers reported in FY 1977. The 3,018 male completers from the cluster represented 37.4% of all male completers during the year, while the 69 female completers represented only 2.1% of all female completers during the year. The completion rate for the cluster was 36.7% (37.1% for males and 24.4% for females).

Table 7-1 shows the indicators for the cluster as opposed to those for all clusters, while table 7-2 shows the indicators for the cluster as compared with all other clusters. In both tables the variances are noted.

TABLE 7-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07/27	3,087	2,168	70.2	1,427	65.8	.462	4.02
07/27 vs All Clusters	27.2%	29.8%	+6.1	31.9%	+4.3	+.068	+$0.62
			MALE				
All Clusters	8,078	5,453	67.5	3,290	60.3	.407	$3.57
07/27	3,018	2,124	70.2	1,401	66.0	.464	4.01
07/27 vs All Clusters	37.4%	39.0%	+2.7	42.6%	+5.7	+.051	$0.44
			FEMALE				
All Clusters	3,286	1,828	55.6	1,194	65.3	.363	$2.92
07/27	69	44	63.8	26	59.1	.377	4.81
07/27 vs All Clusters	2.1%	2.4%	+7.8%	2.2%	-6.2%	+.014	+$1.89

TABLE 7-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Other Clusters	8,277	5,453	65.9%	3,053	56.0%	.369	$3.11
07/27	3,087	2,168	70.2	1,427	65.8	.462	4.02
07/27 vs All Other Clusters			+4.3		+9.8	.093	0.91
			MALE				
All Other Clusters	5,060	3,329	65.8	1,889	56.7	.373	3.24
07/27	3,018	2,124	70.2	1,401	66.0	.464	4.01
07/27 vs All Other Clusters			+4.4		9.3	.091	0.77
			FEMALE				
All Other Clusters	3,217	1,784	55.5	1,168	65.4	.363	2.88
07/27	69	44	63.8	26	59.1	.377	4.81
07/27 vs All Other Clusters			+8.3%		-6.3%	+.014	+$1.93

It is clear that the construction trades have a near across-the-board advantage on other occupational clusters in terms of placement, JTM, and JTM wage.

However, the construction trades vary as to their relative placement effectiveness as shown in table 7-3.

TABLE 7-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
07/27 (M)	3,018	2,124	70.4%	1,401	66.0%	.464	$4.01
Female	69	44	63.8	26	59.1	.377	4.81
Total	3,087	2,168	70.4	1,427	65.8	.462	4.02
CARPENTER, CONSTRUCTION							
07A/27A (M)	940	704	74.9	443	62.9	.471	$4.33
Female	12	9	75.0	7	77.8	.583	6.23
Total	952	713	74.9	450	63.1	.473	4.36
ELECTRICIAN							
07B/27B (M)	213	134	62.9	72	53.7	.338	$3.54
Female	2	1	50.0	1	100.0	1.000	3.00
Total	215	135	62.8	73	54.1	.340	3.53
CEMENT MASON							
07C/27C (T)	178	125	70.2	61	48.8	.343	$4.17
BRICK/STONE MASON							
07D/27D (T)	376	215	64.0	124	57.7	.380	$4.02
PAINTER/PAPERHANGER							
07E/27E (M)	363	255	70.3	145	56.9	.399	$4.36
Female	15	7	46.7	3	42.9	.200	5.74
Total	378	262	69.3%	148	56.5%	.392	4.39

Clearly, subcluster 07I, Plasterer, stands out as a superior vocational offering followed by subcluster 07A, Construction Carpenter. Conversely, subcluster 07H, Plumber, shows very poor performance almost across the board.

Because of the relatively heavier emphasis on union construction programs at CCCs, it is interesting to note the comparisons between them and other centers.

TABLE 7-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
CCCs (M)	1,853	1,334	72.0%	917	68.7%	.495	$4.35
Other Centers (M)	1,165	790	67.8%	484	61.3%	.415	3.39
Difference			+4.2		+7.4	+.080	+$0.96

It is apparent that completers from CCCs did relatively better in the construction trades.

Table 7-5 displays the indicators for subcluster 07A/27A, Construction Carpenter. As mentioned previously, subcluster 07A/27A has superior indicators.

TABLE 7-5

07A/27A Carpenter Construction

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07A/27A	952	713	74.9	450	63.1%	.473	4.36
07A/27A vs All Clusters	8.4%	9.8%	+10.8	10.0%	+1.6%	+.079	$6.96
			MALE				
All Clusters	8,078	5,453	67.5	3,290	60.3%	.407	$3.57
07A/27A	940	704	74.9	443	62.9%	.471	4.33
07A/27A vs All Clusters	11.6%	12.9%	+7.4%	13.5%	+2.6%	+.064	$0.76

Table 7-6 shows the indicators for subcluster 07B/27B. The indicators are generally lower than from other construction trades.

TABLE 7-6

07B/27B Electrician

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07B/27B	215	135	62.8	73	54.1%	.340	3.53
07B/27B vs All Clusters	1.9%	1.9%	-1.3	1.6%	-7.4%	-.054	$0.13
			MALE				
All Clusters	8,078	5,453	67.5	3,290	60.3%	.407	$3.57
07B/27B	213	134	62.9	72	53.7%	.338	3.54
07B/27B vs All Clusters	2.6%	2.5%	-4.6%	2.2%	-6.6%	.069	$0.03

Table 7-7 shows the indicators for subcluster 07C/27C, Cement Mason. This subcluster has good percentage placement but a below average % JTM, resulting in a P/JTM of only .343.

TABLE 7-7

07C/27C Cement Mason

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07C/27C	178	125	70.2%	61	48.0%	.343	4.17
07C/27C vs All Clusters	1.6%	1.7%	+6.1%	1.4%	-13.5%	-.051	$0.77
			MALE				
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	$3.51
07C/27C	177	124	70.1%	61	99.2%	.345	4.17
07C/27C vs All Clusters	2.2%	2.3%	+2.6%	1.9%	-11.1%	-.062	+$0.66

Table 7-8 displays the indicators for subcluster 07D/27D, Brick/Stone Mason. Except for the higher JTM wage, the indicators are very close to those for all clusters and are therefore lower than those for cluster 07/27 as a whole.

TABLE 7-8

07D/27D Brick/Stone Mason

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07D/27D	326	215	66.0%	124	57.7%	.380	4.02
07D/27D vs All Clusters	2.9%	3.0%	+2.1%	2.8%	-3.8%	-.014	+40.62
			MALE				
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	$3.57
07D/27D	323	214	66.3%	124	57.9%	.384	4.02
07D/27D vs All Clusters	4.0%	3.9%	-1.2%	3.8%	-2.4%	-.023	+$0.45

Table 07-9 shows the indicators for subcluster 07E/27E, Painter/Paperhanger. The higher than average % placed and the lower than average % JTM netted out to a P/JTM about equal to that for all clusters but somewhat lower than that for all construction trades. The JTM wage, however, is somewhat higher than the average for the cluster as a whole.

TABLE 7-9

07E/27E Painter/Paperhanger

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07E/27E	378	262	69.3	148	56.5	.392	4.39
07E/27E vs All Clusters	3.3%	3.6%	+5.2%	3.3%	-5.0%	-.002	+0.99
			MALES				
All Clusters	8.078	5,453	67.5%	3,290	60.3%	.407	$3.57
07E/27E	363	255	70.3	145	56.9	.399	4.36
07E/27E vs All Clusters	4.5%	4.7%	+2.8%	4.4%	-3.4%	-.008	+$0.79

Table 7-10 shows the indicators for subcluster 07F/27F, Heavy Equipment Operator, along with a comparison of contract centers and CCCs. The subcluster has a relatively low JTM rate (45%) but a higher JTM wage. The JTM rate for contract centers was only 29.2%.

TABLE 7-10

07F/27F Heavy Equipment Operator (Male Only)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL							
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07F/27F	261	169	64.8	76	45	.291	4.93
07F/27F vs All Clusters	2.3%	2.3%	+0.7%	1.7%	-16.5%	-.103	+1.53
MALES							
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	$3.57
07F/27F	261	169	64.8	76	45	.291	4.93
07F/27F vs All Clusters	32%	3.1%	-2.7%	2.3%	-15.3%	-.116	+$1.36
CONTRACT CENTERS							
Total	130	89	68.5%	26	29.2%	.200	$4.57
CCCs							
Total	131	80	61.1%	50	62.5%	.382	$5.11

As was discussed earlier, subcluster 07H had relatively poor performance, i.e., 57.4% placement, 31.4% JTM, 180 P/JTM rate, and a $3.12/hour JTM. By contrast, subcluster 07I/27I, Plasterer, has excellent performance indicators. The JTM wage ($4.99) was the highest of any occupation.

Subcluster 07K/27K, Construction Labor, was characterized by slightly below average placement (59%) and a well below average JTM rate (49%), although the JTM wage, at $4.22, was above the average for the cluster.

Table 7-11 shows the indicators for subcluster 07L/27L, Spot Welder. Although the placement rate is about average for all occupations, the JTM rate is very low at 48.2%. The JTM wage ($3.75/hour) is higher than for the clusters but $0.27 an hour lower than for all construction trades.

TABLE 7-11

07L/27L Spot Welder

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
			TOTAL				
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40
07L/27L	261	171	65.5	83	48.5	.318	3.81
07L/27L vs All Clusters	2.3%	2.4%	+1.4%	1.9%	-13.0%	-.076	+$0.41
			MALES				
All Clusters	8,078	5,453	67.5%	3,290	60.3%	.407	$3.57
07L/27L	249	164	65.9	79	48.2	.317	3.75
07L/27L vs All Clusters	3.1%	3.0%	-1.6%	2.4%	-12.1%	-.090	+$0.18

TABLE 7-12

Heavy Equipment Operator

Subcluster	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
		TOTALS					
07F/27F	261	169	64.8%	76	45%	.291	$4.93
		Furnace Repairman					
07G	2	0	-	-	-	-	-
		Plumber					
07H	61	35	57.4%	11	31.4%	.180	$3.12
		Plasterer					
07I	115	91	79.1%	60	65.9%	.522	$5.04
		Tilesetter					
07J	1	1	100.0%	1	100.0%	1.00	$3.00
		Construction Laborer					
07K/27K	83	49	59.0%	24	49.0%	.289	$4.22
		Spot Welder					
07L/27L	261	171	65.5%	83	43.5%	.318	$3.81
		Other					
07x/27x	237	186	78.5%	100	53.8%	.422	$3.70

CLUSTER 8 - ELECTRICAL APPLIANCE REPAIR

The 155 Category I terminations from Cluster 8 reported in FY 1977 represented only 1.5% of all Category I terminations reported during the year. All but five of these terminations were made. These 166 completers represented 38.2% of the 434 terminees of all categories from the cluster.

Table 8-1 shows the indicators for the cluster as compared to all clusters.

TABLE 8-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster	166	111	68.9%	37	33.3%	.230	$2.71
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40

Thus, although the placement rate is slightly higher than average (although it is very close to the male placement rate of 67.5%), the JTM rate at 333.3% is the lowest by far of any of the clusters. It should be noted that, because of its relatively higher placement rate, the cluster escapes the dubious honor of the lowest P/JTM rate; that fate is reserved for Cluster 01, Subprofessional. It should also be noted that if the 29 graduates from Arecibo, Puerto Rico, are excluded, the JTM wage rises from $2.71 to $3.29, which is closer to the $3.40 average for all clusters and $3.57 for all Category I males.

Table 8-2 shows the indicators for the major subclusters, 08A, Air Conditioner Repair Mechanic.

TABLE 8-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	114	72	63.2%	7	9.7%	.061	$2.82

Thus, the graduates of this subcluster were not very successful in obtaining work for which they were trained.

The other subcluster with a significant number of graduates was 08G, Electrician Helper. Table 8-3 shows the indicators for the subcluster.

TABLE 8-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	30	27	90.0%	22	81.5%	.733	$2.48

CLUSTER 09 - INDUSTRIAL PRODUCTION

The 1,420 Category I termination for Cluster 09 represented 12.5% of all completers from all clusters reported in FY 1977. The 1,193 male completers were 14.8% of all male completers reported during the year; 41.4% of all terminations from the cluster were completers (41.8% for men and 39.2% for these clusters compared to those for all clusters).

TABLE 09-1

	# Trained	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Male 09	1,193	832	69.7%	549	64.9%	.453	$3.52
Female 09	227	122	53.7	62	50.8	.273	3.17
Total	1,420	954	67.2	602	63.1	.424	3.48
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40

The indicators for this cluster are very near those for all clusters. Considering females separately, the cluster has a lower JTM rate (50.8% compared to 65.3% for all females) but a higher JTM wage ($3.17 vs $2.92).

No one subcluster is dominant in Cluster 09. Each of the major subclusters will be discussed separately.

Table 09-2 shows the indicators for subcluster 09A, Machine Operator. All of the completers from the subcluster were male.

TABLE 09-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL 09A	60	37	61.7%	24	64.9%	.400	$3.42

This subcluster had indicators which were about average for all clusters for males.

Table 09-3 shows the indicators for subcluster 09B, Combination Welder, comparing CCCs, males, and the total for the subcluster. In addition, the indicators are given for a similar occupation 07L/27L, Spot Welder.

TABLE 09-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
CCCs 09B	142	120	84.5%	63	53.3%	.444	$3.75
Males 09B	591	428	72.4	244	57.0	.413	3.63
Total 09B*	606	433	71.5%	247	50.0%	.408	$3.63
Total 07L/27L*	261	171	65.5%	83	48.5%	.318	$3.81

* Total is not the sum of the categories because they are not mutually exclusive.

For the most part, 09B shows itself to be an excellent vocation for Job Corps graduates. Centers which had completers in subcluster 09B did not have completers in subcluster 07L/27L and vice versa. One wonders if the two vocations are unlike enough to warrant separate categories.

Table 09-4 shows the indicators by center for subcluster 09C, Sheet Metal Worker.

TABLE 09-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL	44	28	63.6%	8	28.6%	.181	$2.91

Although the placement range for subcluster 09C is about average, the JTM rate at 28.6% is very low as is the JTM wage.

Table 09-5 shows the indicators for subcluster 09D, Furniture Upholsterer.

TABLE 09-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
TOTAL 09D	51	39	76.5%	25	64.1%	.490	$2.25

Table 09-6 shows the indicators for subcluster 09E, Electronics Assembler, by male and female.

TABLE 09-6

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
MALE	98	62	63.3%	41	66.1%	.418	$3.24
FEMALE	42	23	54.8	6	26.1	.143	2.35
TOTAL 09E	140	85	60.7%	47	55.3%	.336	$3.13

Although the indicators for males are close to average, the indicators for females are very low.

Table 09-7 shows the indicators for subcluster 09F, Offset Printer.

TABLE 09-7

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
MALE	65	35	53.8%	11	31.4%	.69	$3.36
FEMALES	127	71	55.9	24	33.8	.189	2.76
TOTAL 09F	192	106	55.2%	35	33.0%	.182	$2.95

With the exception of the hourly wage for males ($3.36 as compared to $2.76 for females), the indicators for the subclusters are very low.

CLUSTER 10 - TRANSPORTATION

The 93 Category I terminees from the cluster (64 men and 29 women) represented only 0.8 percent of Category I terminees reported during FY 1977. These 93 completers were 31.5 percent of the 293 terminees of all categories from the cluster reported during the year.

Three subclusters were active in the cluster during the year. Table 10-1 shows the Category I indicators for each of these subclusters, the cluster as a whole, and all clusters.

TABLE 10-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10A Truck Driver	23	14	60.9%	3	21.4%	.130	$4.67
10B Warehouseman	50	30	60.0	19	63.3	.380	3.04
10C Forklift Operator	17	17	100.0	4	23.5	.235	2.93
Cluster 10 Total	92	62	66.7	31	50.0	.333	3.16
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40

Table 10-2 shows the indicators for the graduates of subcluster 10A. While the placement rate is near average, the JTM rate is very low.

Table 10-3 compares the male graduates of subcluster 10B, Warehouseman, with the female graduates of the subcluster. The striking comparison is in JTM Wage: $3.42 per hour for males and $2.69 per hour for females.

TABLE 10-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10A Truck Driver TOTAL	23	14	60.9%	3	21.4%	.130	$4.67

TABLE 10-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10B Warehouseman							
Female	29	17	58.6%	10	58.8%	.345	$2.69
Male	21	13	61.9	9	69.2	.428	3.42
TOTAL	50	30	60.0%	19	63.3%	.380	$3.04

TABLE 10-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10C Forklift Operator							
TOTAL	17	17	100.0%	4	25.0%	.235	$2.93

CLUSTER 11 - HEALTH OCCUPATIONS

The 1,262 Category I terminees from the cluster represented 11.1% of all Category I terminations reported during FY 1977. The 103 male Category I terminees were 1.3% of all male completers reported during the year. The 1,159 female Category I terminees represented 35.3% of all female completers reported during the year. Cluster 11 produced the second largest number of female completers (exceeded only by Cluster 02, Clerical/Sales, which had 1,320 female completers). The overall completion rate for the cluster was 42.7% (42.4% for men and 42.7% for women).

Table 11-1 displays a comparison of the indicators for the cluster with the indicators for all clusters.

TABLE 11-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 11	1,262	721	57.1%	498	69.1%	.395	$2.59
All Clusters	11,364	7,281	64.1%	4,480	61.5%	.394	$3.40

Table 11-1 shows that while the percent placed is seven percentage points lower for Cluster 11, the %JTM is 7.6 percentage points higher, netting out to a P/JTM rate equal to the average for all clusters.

The major difference is that the JTM wage is $0.81 an hour lower for Cluster 11 than it is for all clusters.

Table 11-2 shows the indicators for Cluster 11 males as compared to all clusters.

TABLE 11-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 11 (M)	103	63	61.2%	45	71.4%	.437	$2.81
All Clusters (M)	8,078	5,453	67.5%	32	60.3%	.407	$3.57

As was the case in table 11-1, table 11-2 shows a lower % placed for Cluster 11 and a much higher %JTM (11.1 percentage points). The JTM wage, however, is $0.76 an hour less than for all male completers.

Table 11-3 shows the indicators for Cluster 11 females as compared to both total Category I females and all Category I females other than those from Cluster 11.

TABLE 11-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Cluster 11 (F)	1,159	658	56.8%	453	68.8%	.391	$2.57
All Other Clusters (F)	2,127	1,170	55.1%	741	63.3%	.348	$3.13
All Clusters (F)	3,286	1,828	55.6%	1,194	65.3%	.363	$2.92

Thus, table 11-3 shows that the % placed and %JTM rates are higher than for all other clusters; the JTM wage is $0.56 an hour less than for all other clusters.

The single major subcluster in Cluster 11 for both men and women is 11A, Nurse's Assistant. This subcluster produced 79.1% of all completers from the cluster reported in FY 1977. Table 11-4 shows a comparison of the indicators for subcluster 11A with the indicators for all other subclusters in Cluster 11 and with the cluster totals.

TABLE 11-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
11A (M)	78	43	55.1%	26	60.5%	.333	$2.62
11A (F)	920	527	57.3	348	66.0	.378	2.50
11A (T)	998	570	57.1	374	65.6	.375	2.51
All Other Sub-clusters (T)	264	151	57.2%	124	82.1%	.470	$2.83
Cluster II (T)	1,262	721	57.1%	498	69.1%	.395	$2.59

Table 11-4 shows that the % placed for the other subclusters is about the same as for subcluster 11A, but that the %JTM is much higher than that of the other subclusters (82.1% vs 65.6%), as is the JTM wage ($2.83 vs $2.51). Even so, the JTM wage is low in comparison with other Job Corps occupations.

Of all the occupations offered in Cluster 11, three stand out as having significantly higher indicators than other subclusters, 11B Dental Assistant, 11C Licensed Practical Nurse, and 11F EKG Technician. Table 11-5 shows the indicators for these subclusters.

TABLE 11-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
11B (T)	46	32	69.6%	24	75.0%	.522	$3.20
11C (T)	30	27	90.0	16	59.3	.533	3.74
11F (T)	18	13	72.2%	7	53.9%	.389	$3.33

F. AN ANALYSIS OF CENTER VARIATIONS WITHIN VOCATIONAL OFFERINGS

This section discusses center variations within vocational offerings. In addition, overall rankings for centers are displaced. These rankings are a composite of four basic indicators used throughout this study, i.e., % Category I, % Placed, % JTM, and JTM Wage. These indicators are admittedly arbitrary as are the equal weighting of the indicators in determining the ranking. No implications are made as to the quality of the centers, and none should be inferred. Too many variables are involved, many of which are beyond the control of center management.

Los Angeles is the top rated center for both males and females, while Whitney Young is the lowest rated for males and Detroit is the lowest rated for females. For the record, Trapper Creek is the lowest ranked CCC, while Columbia Basin is the highest ranked CCC and third among all centers with significant male enrollments. For both male and female center rankings, centers with only a few graduates of one sex are excluded from the rankings for that sex.

A perusal of center rankings will yield much to the reader; for example, the extremely low completion rate (% Category I) for women at Gary is worthy of note and concern. Less than nine percent of all women at Gary were graduates; this is by far the lowest completion rate for either sex at any center. (However, preliminary FY 1978 data show that the completion rate for women at Gary has improved dramatically.)

Also worthy of note is the relatively low performance of graduates of the "big four": Breckinridge, Atterbury, Clearfield, and Gary. Of these four giant centers, only Gary has relatively good indicators. Even Clearfield which is often cited as one of the best Job Corps centers, at least in ambiance, ranks only 41st among 50 male centers. Gary, which has had exactly the opposite reputation, ranks 32d among male centers. So much for ambiance.

One of the hot debates about Job Corps is whether the Job Corps on-center training is the ultimate in vocational training for its clientele. This study is inconclusive on this point. Both Los Angeles and San Jose purchase vocational training from other sources and are highly ranked. However, many other centers, notably CCCs, are highly ranked and perform most training on center.

The first two tables which follow show the rankings for each indicator and overall for males and females by center. Following these tables are discussions of center variations for major vocational clusters and major subclusters.

CENTER RANKINGS FOR MALES FOR EACH INDICATOR AND OVERALL

(Displayed in Overall Rank Order)

CENTER	% CAT I	RANK	% PLACED	RANK	% JTM	RANK	JTM WAGE	RANK	COMPOSITE RANK
Los Angeles	49.2%	9	93.3%	2	85.7%	1	$5.80	1	1
Keystone	47.1	11	81.3	10	69.2	14	4.43	7	2
Columbia Basin CCC	51.9	6	77.6	12	67.8	18	4.27	10	3
Treasure Lake CCC	38.0	24	87.4	6	82.2	5	4.19	15	4
San Jose	74.4	1	78.7	11	81.3	6	3.30	37	5
Wolf Creek CCC	53.0	5	81.8	9	67.8	18	3.93	24	6
Ouachita CCC	27.1	59	90.0	5	69.4	13	4.28	9	7
Arecibo	44.6	13	92.3	3	83.3	3	2.19	49	8
Flatwoods CCC	34.5	27	91.2	4	68.7	15	3.94	23	9
Weber Basin CCC	33.6	29	71.3	24	75.9	8	4.39	8	9
Golconda CCC	30.1	31	73.6	19	83.6	2	4.09	20	11
Tongue Point	23.8	42	76.7	14	72.7	10	4.61	6	11
Excelsior Springs	26.8	40	95.0	1	66.7	21	4.25	11	13
Blackwell CCC	37.2	25	60.6	42	83.3	3	4.87	3	13
Timber Lake CCC	38.5	23	72.6	20	65.3	27	4.65	4	15
Curlew CCC	41.3	20	75.4	17	67.3	20	4.13	18	16
Angell CCC	49.7	8	69.2	29	58.1	33	4.25	11	17
Boxelder CCC	28.1	36	75.9	15	75.3	9	3.97	21	17
Cass CCC	34.1	28	82.1	8	71.7	11	3.33	36	19
Fort Simcoe CCC	49.1	10	59.1	43	64.3	29	4.89	2	20
Portland	45.3	12	70.7	27	65.9	24	3.74	31	21
Collbran CCC	22.1	46	74.7	18	67.9	17	4.23	13	22
Marsing CCC	41.8	19	71.6	22	52.8	41	4.19	15	23
Woodstock	22.9	43	70.8	26	76.5	7	3.93	24	24
Mingo CCC	29.8	33	69.2	29	68.5	16	3.96	22	24
Jacobs Creek CCC	41.2	21	68.2	32	66.7	21	4.18	17	26
Great Onyx CCC	51.3	7	64.1	37	60.4	32	3.87	27	27
Anaconda CCC	42.8	17	71.4	23	58.0	35	3.80	30	28
Schenck CCC	28.8	35	77.0	13	65.7	25	3.48	33	29
El Paso	61.9	2	66.4	34	65.2	28	2.49	47	30
Phoenix	54.8	3	64.2	36	52.0	46	3.88	26	30
Gary	30.0	32	71.1	25	65.7	25	3.39	34	32
Pine Ridge CCC	43.8	15	57.1	46	64.1	30	3.87	27	33
Lyndon B. Johnson CCC	24.8	41	75.8	16	58.0	35	3.51	32	34
Oconaluftee CCC	44.4	14	65.0	35	53.9	40	3.32	35	34
Pittsburgh	13.9	50	85.4	7	54.3	39	3.86	29	36
Harper's Ferry CCC	27.2	38	68.6	31	52.1	45	4.11	19	37
Pine Knot CCC	53.8	4	57.2	45	44.1	48	3.28	36	37
Kicking Horse	29.0	34	52.8	49	55.4	38	4.22	14	39

CENTER RANKINGS FOR MALES FOR EACH INDICATOR AND OVERALL (CONT.)

(Displayed in Overall Rank Order)

CENTER	% CAT I	RANK	% PLACED	RANK	% JTM	RANK	JTM WAGE	RANK	COMPOSITE RANK
Clearfield	43.8	15	62.0	40	52.8	41	3.18	41	40
Detroit	22.5	44	63.6	38	71.4	12	3.14	44	41
Tulsa	31.9	30	62.1	39	66.7	21	2.87	48	41
Rio Grande	27.8	37	72.0	21	61.1	31	1.88	50	43
Trapper Creek CCC	19.2	49	57.1	46	52.8	41	4.64	5	44
Cincinnati	40.9	22	67.1	33	52.6	46	3.02	46	45
Hawaii	22.2	45	69.4	28	58.1	33	3.16	43	46
Breckinridge	41.9	18	61.1	41	44.0	49	3.12	45	47
Atterbury	34.7	26	53.0	47	38.1	50	3.22	40	48
New Jersey	21.0	47	57.5	44	55.6	37	3.24	37	49
Whitney Young	20.1%	48	42.4%	50	46.4%	47	$3.18	41	50

CENTER RANKINGS FOR FEMALES FOR EACH INDICATOR AND OVERALL

(Displayed in Overall Rank Order)

CENTER	% CAT I	RANK	% PLACED	RANK	% JTM	RANK	JTM WAGE	RANK	COMPOSITE RANK
Los Angeles	61.2%	2	73.7%	2	82.5%	5	$3.44	2	1
Hawaii	33.9	16	75.0	1	86.7	3	3.03	6	2
Portland	41.2	10	72.3	4	85.3	4	2.91	8	2
Tongue Point	27.2	17	65.9	6	79.4	6	3.62	1	4
Angell CCC	100.0	1	70.3	5	46.2	19	3.05	5	4
Excelsior Springs	42.5	8	61.3	9	63.1	11	3.24	3	6
Phoenix	43.2	7	58.8	10	71.4	7	2.87	11	7
Charleston	40.3	11	65.3	7	62.5	12	2.97	7	8
Cleveland	38.4	14	53.3	12	70.8	8	3.08	4	9
El Paso	60.0	3	41.7	20	90.0	1	2.44	18	10
McKinney	42.2	9	56.5	11	66.4	10	2.55	13	11
Atlanta	43.6	6	73.7	2	45.5	20	2.53	16	12
Gary	8.8	21	47.2	16	88.2	2	2.71	12	13
Keystone	36.4	15	50.2	14	61.3	13	2.89	10	14
Albuquerque	46.0	4	44.3	19	55.9	17	2.54	14	15
Atterbury	16.9	20	52.8	13	57.1	16	2.91	8	16
Breckinridge	44.1	5	46.6	17	42.6	21	2.44	18	17
Blue Ridge	25.1	18	62.0	8	59.1	14	2.36	21	17
Guthrie	40.0	12	45.7	18	52.0	18	2.54	14	19
Cincinnati	39.3	13	50.0	15	58.3	15	2.38	20	20
Detroit	22.7%	19	31.8%	21	66.7%	9	$2.48	17	21

F.1 Center Variations for Cluster 01 - Subprofessional

Table F-1-1 shows the center indicators for subcluster 01-A draftsmen.

TABLE F-1-1

01-A, Draftsman

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Albuquerque (F)	1	0	0%	-	-%	-	$ -
Guthrie (F)	39	15	38.5	3	20.0	.077	2.91
Guthrie (M)	1	1	100.0	-	-	-	-
San Jose (M)	7	6	85.7	5	83.3	.714	3.50
Breckinridge (F)	6	1	16.7	-	-	-	-
Breckinridge (M)	14	3	21.4	-	-	-	-
TOTAL	68	26	38.2%	8	30.8%	.117	$3.28

Thus, only San Jose has respectable indicators. Breckinridge, with only 20% placement and no job training matches, had the worst indicators.

Table F-1-2 shows the indicators for subcluster 01-X, Others. Note that all X subclusters for all occupations are undefined (equivalent to "NEC" in the DOT). A given X subcluster represents different occupations for different centers.

TABLE F-1-2

1-X, Others

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Golconda	1	0	0%	-	-%	-	$ -
LA (M)	1	1	100.0	-	-	-	-
San Jose (M)	1	1	100.0	1	100.0	1.000	4.00
Clearfield (M)	46	24	52.2	6	25.0	.130	3.02
TOTAL	49	26	53.1%	7	29.6%	.143	$3.23

Ninety percent of the activity in the subclusters is at Clearfield. The indicators for Clearfield graduates, however, are well below average in all categories.

F.2 Center Variations for Cluster 02/22 - Clerical/Sales

Table F-2-1 shows an exception report for males in Cluster 02/22. An exception report is a listing of centers above and below certain arbitrary limits for an indicator. Table F-2-2 shows the exception report for the cluster for females.

TABLE F-2-1

Centers at or above 80% Placed		Centers at or above 80% JTM Rate	
Blackwell	100.0%	Blackwell	100.0%
Boxelder	100.0	Cleveland	80.0
Anaconda	85.7	Excelsior Springs	88.9
Collbran	100.0	Los Angeles	86.4
Wolf Creek	100.0	Woodstock	100.0
Cleveland	100.0	Portland	100.0
Excelsior Springs	94.7	Atterbury	82.4
Los Angeles	91.7	Gary	80.0
Woodstock	100.0	Charleston	100.0%
Phoenix	87.5		
Charleston	100.0%		

Centers at or below 60% Placed		Centers at or below 60% JTM Rate	
Pine Ridge	45.[illegible]%	Pine Ridge	20.0%
Trapper Creek	60.0	Boxelder	0.0
Weber Basin	50.0	Anaconda	50.0
Curlew	57.1	Collbran	0.0
Kegstone	0.0	Weber Basin	50.0
Albuquerque	0.0	Curlew	25.0
Detroit	0.0	Wolf Creek	50.0
Kicking Horse	60.0	Kegstone	0.0
Portland	50.0	Albuquerque	0.0
Breckinridge	47.8	Detroit	0.0
Gary	35.7%	Cincinnati	16.7%

TABLE F-2-2

Centers at or above 80% Placed		Centers at or above 80% JTM Rate	
El Paso	100.0%	Los Angeles	85.1%
Tulsa	100.0	El Paso	100.0
San Jose	100.0	Tulsa	100.0
Hawaii	84.6%	San Jose	100.0
		Hawaii	100.0
		Portland	83.3
		Gary	81.8%
Centers at or below 60% Placed		**Centers at or below 60% JTM Rate**	
Keystone	50.0%	Blue Ridge	55.9%
Charleston	50.0	Albuquerque	58.0
Albuquerque	42.9	Excelsior Springs	56.4
Guthrie	36.0	Detroit	25.0
Atlanta	50.9	Breckinridge	23.8%
Detroit	18.2		
Cincinnati	40.0		
Phoenix	57.1		
Breckinridge	40.4		
Gary	52.4%		

Among the subclusters, the high JTM Wage for Los Angeles graduates in subcluster 02A/22A, Clerk Typist, is worthy of note. Also worthy of note is the very high indicators at Excelsior Springs for subcluster 02D/22D, Keypunch Operator (100% Placed, 82.4 JTM Rate, and $5.53 JTM Wage).

F.3 Center Variations for Cluster 03 - Service Occupations

Table F-3-1 shows an exception report for the major male subcluster, 03B, Custodial Maintenance.

TABLE F-3-1

Centers at or above 80% Placed		Centers at or above 80% JTM Rate	
LBJ	80.0%	Blackwell	100.0%
Golconda	80.0	Boxelder	100.0
Cass	91.0	Anaconda	100.0
Trapper Creek	100.0	San Jose	83.3%
Timber Lake	80.0		
Curlew	80.0		
Wolf Creek	82.4		
Marsing	88.9		
Woodstock	100.0		
Whitney Young	100.0%		

Centers at or below 60% Placed		Centers at or below 60% JTM Rate	
Harpers Ferry	50.0%	Harpers Ferry	50.0%
Pine Knot	35.0	Pine Knot	16.7
Schenck	24.0	LBJ	25.0
Great Onyx	50.0	Schenck	16.7
Blackwell	28.6	Jacobs Creek	50.0
Pine Ridge	33.3	Great Onyx	33.3
Anaconda	33.3	Oconaluftee	50.0
Collbran	60.0	Golconda	25.0
Weber Basin	54.0	Cass	20.0
Fort Simcoe	25.0	Treasure Lake	33.3
Albuquerque	40.0	Ouachita	50.0
Tongue Point	50.0	Pine Ridge	0.0
Kicking Horse	0.0	Trapper Creek	50.0
Breckinridge	0.0	Weber Basin	42.9
Atterbury	54.3%	Timber Lake	31.3
		Curlew	50.0
		Wolf Creek	42.9
		Fort Simcoe	0.0
		Columbia Basin	33.3
		Albuquerque	50.0
		Tongue Point	0.0
		Woodstock	0.0
		Whitney Young	0.0
		Cincinnati	46.7
		Kicking Horse	0.0
		Hawaii	0.0
		Breckinridge	0.0
		Atterbury	41.4
		Gary	44.4
		Clearfield	36.7%

Nearly one half of the 634 graduates of subcluster 033 were from Atterbury and Clearfield. Table F-3-2 shows the indicators for these centers.

TABLE F-3-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Atterbury	129	70	54.3%	29	41.4%	.225	$2.87
Clearfield	157	98	62.4%	36	36.7%	.229	$2.86

Table F-3-3 shows the center variation for the major female occupation within the cluster, 03K, Nursery School Teacher.

TABLE F-3-3

03-K, Teacher, Nursery School (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
738 Cleveland	1	1	100.0%	-	-	-	$ -
709 Albuquerque	1	1	100.0	-	-	-	-
715 Guthrie	39	19	48.7	6	31.6	.154	2.25
702 LA	2	2	100.0	1	50.0	.500	2.70
717 Tongue Point	3	0	0.0	-	-	-	-
TOTAL	46	23	50.0%	7	30.4%	.152	$2.31

F.4 Center Variations for Cluster 04 - Forestry and Farming

Although several contract centers had Category I terminations in subcluster 04-B, the bulk of the terminees was from Breckinridge and Portland. Table F-4-1 shows the comparison.

TABLE F-4-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Breckinridge	55	24	43.6%	6	25.0%	.108	$2.67
Portland	20	16	80.0%	9	56.0%	.450	$2.53

The following comparison of performance for subcluster 04-C shows that with the exception of Kicking Horse, the performance indicators are above average.

TABLE F-4-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Anaconda (M)	1	1	100.0%	0	0%	0	$ 0
Curlew (M)	15	13	76.9	10	76.9	.666	3.50
Angell (M)	26	21	61.9	13	61.9	.500	3.20
Angell (F)	15	14	93.3	6	42.9	.400	4.06
Wolf Creek	66	58	69.0	40	69.0	.606	3.30
Kicking Horse	11	5	40.0%	2	40.0%	.181	$2.93

F.5 Center Variations for Cluster 05/25 - Food Service

Table F-5-1 shows an exception report for males for the cluster while table F-5-2 shows an exception report for females.

TABLE F-5-1

Centers Below 60% Placed	
Pine Knot	46.7
Blackwell	36.4
Golconda	33.3
Pine Ridge	40.0
New Jersey	41.7
Whitney Young	28.6
Kicking Horse	50.0
San Jose	40.0
Atterbury	44.8
Gary	59.5

Centers Above 80% Placed	
Flatwoods	100.0
LBJ	85.7
Jacobs Creek	87.5
Ouachita	100.0
Treasure Lake	93.8
Collbran	100.0
Wolf Creek	82.4
Keystone	100.0
Excelsior Springs	88.9
Tongue Point	100.0
Woodstock	100.0
San Jose	81.3
Santa Rosa	86.7

Centers Below 60% JTM	
Flatwoods	41.7
Pine Knot	57.1
Jacobs Creek	42.9
Blackwell	50.0
Cassadaga	50.0
Ouachita	55.6
Trapper Creek	33.3
Anaconda	33.3
Columbia Basin	53.6
Excelsior Springs	50.0
Whitney Young	50.0
Cincinnati	44.4
Breckinridge	50.0
Atterbury	28.6
Clearfield	36.6

Centers Above 80% JTM	
Golconda	100.0
Mingo	90.9
Tongue Point	100.0
Woodstock	100.0
Portland	100.0
Santa Rosa	84.6

TABLE F-5-2

Centers Below 60% Placed		Centers Above 80% Placed	
Angell	57.1	Portland	100.0
Charleston	45.0	Santa Rosa	100.0
Keystone	0	Los Angeles	85.7
Cleveland	0		
McKinney	51.6		
Excelsior Springs	41.9		
Tongue Point	59.1		
Atlanta	50.0		
El Paso	40.0		
Hawaii	40.0		
Breckinridge	41.7		
Gary	0		

Centers Below 60% JTM		Centers Above 80% JTM	
Keystone	0	Tongue Point	92.3
Cleveland	0	El Paso	100.0
Excelsior Springs	55.6	Hawaii	100.0
Atlanta	50.0	Portland	100.0
Cincinnati	57.1	Santa Rosa	100.0
Atterbury	40.0	Albuquerque	83.3
Gary	0	Los Angeles	83.3

Table F-5-3 shows an exception report for subcluster 05B/25B, Cook, for males while table F-5-4 shows an exception report for females.

TABLE F-5-3

Centers Below 60% Placed		Centers Above 80% Placed	
Blackwell	36.4	Flatwoods	100.0
Golconda	33.3	Jacobs Creek	87.5
Pine Ridge	40.0	Ouachita	100.0
New Jersey	41.7	Treasure Lake	93.3
Cincinnati	0	Wolf Creek	85.7
Kicking Horse	45.5	Woodstock	100.0
Breckinridge	59.6	San Jose	100.0
Atterbury	41.9	Santa Rosa	100.0
Gary	55.3		

Centers Below 60% JTM		Centers Above 80% JTM	
Flatwoods	41.7	Golconda	100.0
LBJ	33.3	Woodstock	100.0
Jacobs Creek	14.3	San Jose	100.0
Great Onyx	42.9		
Oconoluftee	50.0		
Blackwell	25.0		
Cassadaga	25.0		
Ouachita	44.4		
Trapper Creek	28.6		
Anaconda	33.3		
Collbran	50.0		
Timber Lake	33.3		
Curlew	50.0		
Marsing	59.1		
Columbia Basin	50.0		
Cincinnati	22.2		
El Paso	50.0		
Kicking Horse	40.0		
Hawaii	50.0		
Portland	50.0		
Breckinridge	47.1		
Atterbury	34.6		
Clearfield	57.5		

TABLE F-5-4

Centers Below 60% Placed		Centers Above 80% Placed	
Blackwell	36.4	Flatwoods	100.0
Golconda	33.3	Jacobs Creek	87.5
Angell	50.0	Albuquerque	100.0
Atlanta	50.0	Los Angeles	100.0
El Paso	40.0		
Hawaii	40.0		
Breckinridge	58.2		

Centers Below 60% JTM		Centers Above 80% JTM	
Atlanta	0	Angell	100.0
Cincinnati	28.6	Los Angeles	100.0
Breckinridge	42.9	El Paso	100.0
Atterbury	25.0	Hawaii	100.0
Albuquerque	0		

Table F-5-5 shows the indicators for subcluster 05-C/25-C, Baker. Because the number of centers is small relative to the number of completers, all centers with completers will be listed.

TABLE F-5-5

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Pine Knot (M)	15	7	46.7%	4	57.1%	.266	$2.22
Angell (M)	1	0	0	-	-	-	-
Marsing ([illegible])	1	1	100.0	-	-	-	-
Tongue Point (T)	3	3	100.0	2	66.7	.667	2.88
Portland (T)	8	7	87.5	7	100.0	.875	2.51
Breckinridge (T)	59	32	54.2	9	28.1	.152	2.60
Atterbury (T)	73	36	49.3	4	11.1	.055	2.44
Clearfield (M)	35	20	57.1	8	40.0	.229	2.91
Santa Rosa (M)	1	1	100.0	-	-	-	-
Gary (T)	15	8	53.3	2	25.0	.133	3.12
TOTAL	212	115	54.3%	36	31.3%	.169	$2.64

Only a little more than half of the graduates of the subcluster were placed, and less than one-third of these got jobs as bakers. Only the graduates of Tongue Point and Portland were exceptions.

F.6 Center Variations for Cluster 06/26 - Auto and Machine Repair

Table F-6-1 is an "exception report" for the cluster for males.

TABLE F-6-1

Centers Below 60% Placed		Centers Above 80% Placed	
Schenck	33.3%	LBJ	100.0%
Mingo	50.0	Cass	90.0
Trapper Creek	50.0	Ouachita	87.5
Boxelder	52.9	Treasure Lake	100.0
Timber Lake	57.9	Arecibo	94.6
Angell	57.1	Pittsburgh	89.5
Ft. Simcoe	53.8	San Jose	83.3
New Jersey	54.8	Flatwoods	100.0
Woodstock	50.0	Keystone	100.0%
Whitney Young	33.3		
Detroit	50.0		
El Paso	58.3		
Kicking Horse	33.3		
Phoenix	55.8		
Atterbury	55.8		
Tongue Point	0.0		
Collbran	0.0%		

Centers Below 60% JTM		Centers Above 80% JTM	
Pine Knot	37.3%	Treasure Lake	[illegible].0%
LBJ	0.0	Mingo	100.0
Schenck	0.0	Wolf Creek	83.3
Jacobs Creek	41.2	Arecibo	85.7
Great Onyx	33.3	Flatwoods	100.0
Oconaluftee	0.0	Keystone	100.0%
Trapper Creek	6.0		
Anaconda	40.0		
Collbran	0.0		
Timber Lake	27.3		
Angell	37.5		
Marsing	50.0		
Fort Simcoe	57.1		
Rio Grande	50.0		
Pittsburgh	47.1		
Ouachita	14.3%		

Continued-

TABLE F-6-1
Continued

Centers Below 60% JTM		Centers Above 80% JTM
Woodstock	40.0%	
Whitney Young	0.0	
Detroit	37.5	
Cincinnati	58.3	
El Paso	33.3	
Tulsa	0.0	
Kicking Horse	0.0	
Phoenix	20.8	
Hawaii	41.2	
Portland	58.3	
Breckinridge	37.4	
Atterbury	25.3	
Clearfield	49.6	
Tongue Point	0.0%	

Table F-6-2 displays the indicators for subcluster 6A, Auto Mechanic Helper, both for the total subcluster and selected centers.

TABLE F-6-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Arecibo	20	19	95.0%	14	73.7%	.700	$1.95
El Paso	21	14	66.7	10	57.1	.381	2.32
Hawaii	20	15	75.0	6	40.0	.300	3.25
Atterbury	22	18	81.8	2	11.1	.091	3.25
Clearfield	131	78	59.5	29	37.2	.227	3.07
Other Centers	44	26	59.1	7	34.6	.205	3.26
TOTAL	258	170	68.0%	68	40.0%	.264	$2.77

Thus, on balance, graduates from no centers did particularly well in this subcluster, given the low JTM wage from Arecibo. (Wages in Puerto Rico do not compare to wages in the continental U.S.)

Table F-6-3 displays an "exception report" for subcluster 06B/26B, Auto Service Repair.

TABLE F-6-3

06B/26B Males

Centers Below 60% Placed		Centers Above 80% Placed	
Schenck	33.3%	LBJ	100.0%
Jacobs Creek	58.3	Oconaluftee	100.0
Mingo	50.0	Cass	100.0
Trapper Creek	50.0	Ouachita	87.5
Boxelder	52.9	Treasure Lake	100.0
Timber Lake	57.9	Pine Ridge	100.0
Angell	50.0	Anaconda	100.0
Wolf Creek	50.0	Marsing	100.0
New Jersey	53.8	Pittsburgh	100.0
Woodstock	42.9	Flatwoods	100.0%
Whitney Young	33.3		
Detroit	42.9		
Breckinridge	59.1		
Atterbury	54.0		
Clearfield	0.0		
Kicking Horse	25.0%		

Centers Below 60% JTM		Centers Above 80% JTM	
Pine Knot	27.8%	Mingo	100.0%
LBJ	0.0	Wolf Creek	100.0
Jacobs Creek	57.1	New Jersey	83.7
Great Onyx	33.3	Flatwoods	100.0%
Oconaluffee	0.0		
Ouachita	14.3		
Trapper Creek	0.0		
Anaconda	25.0		
Timber Lake	18.6		
Curlew	50.0		
Angell	33.3		
Marsing	33.3		
Ft. Simcoe	50.0		
Woodstock	33.3		
Whitney Young	0.0%		

Continued

TABLE F-6-3

06B/26B Males
Continued

Centers Below 60% JTM		Centers Above 80% JTM
Detroit	50.0%	
Cincinnati	58.3	
Kicking Horse	0.0	
Phoenix	16.7	
Breckinridge	35.9	
Atterbury	22.6	
Clearfield	0.0%	

Table F-6-4 displays the indicators for subcluster 06E, Auto Body Repairman.

TABLE F-6-4

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Arecibo	17	16	94.1%	14	87.5%	.824	$1.91
Rio Grande	14	10	71.4	3	30.0	.214	1.75
Portland	17	12	70.6	7	58.3	.411	3.71
Breckinridge	72	52	72.2	21	40.4	.292	2.79
Atterbury	54	23	42.6	9	39.1	.167	2.81
Gary	32	28	87.5	18	64.3	.563	2.85
Clearfield	62	40	64.5	22	55.0	.355	3.25
New Jersey	11	6	54.5	3	50.0	.273	3.16
Other Centers	11	8	72.7	2	25.0	.181	3.07
TOTAL	290	195	67.2%	99	50.8%	.341	$2.83

With the exception of Atterbury and New Jersey, all centers had average or better placement rates; and with the exception of Arecibo and Gary all centers had below average JTM rates. It is interesting to note that both Puerto Rico centers, Arecibo and Rio Grande, had very high placement rates, but that Arecibo had an 87.5% JTM rate while Rio Grande had a 30% JTM rate.

F.7 Center Variations for Cluster 07/27 - Construction Trades

Table F-7-1 is an "exception report" showing those centers above and below certain arbitrarily established benchmarks for the cluster as a whole. It is interesting to note that a CCC like Pine Knot with its heavy involvement in union construction program has such poor indicators.

TABLE F-7-1
07/27 Males

Center Below 60% Placement Rate		Centers Above 80% Placement Rate	
Pine Knott	55.1%	Flatwoods	89.6%
Trapper Creek	54.5	Schenck	80.0
New Jersey	56.0	Cass	80.0
Whitney Young	40.5	Ouachita	90.0
Tulsa	50.0	Treasure Lake	85.1
Breckinridge	59.5	Boxelder	81.6
Atterbury	55.9%	Timber Lake	80.7
		Wolf Creek	80.2
		Columbia Basin	80.8
		Arecibo	94.1
		Keystone	100.0
		Excelsior Springs	100.0
		Los Angeles	100.0
		Tongue Point	92.9
		Cincinnati	100.0
		Mississippi	100.0
		San Jose	88.9%

Centers Below 60% JTM Rate		Centers Above 80% JTM Rate	
Harpers Ferry	48.5%	Jacobs Creek	80.9%
Pine Knott	46.7	Blackwell	94.1
Oconaluftee	54.3	Golconda	81.5
Angell	52.9	Treasure Lake	91.2
Marsing	49.4	Trapper Creek	83.3
New Jersey	50.0	Weber Basin	85.4
Whitney Young	52.9	Timber Lake	90.4

Continued-

TABLE F-7-1

07/27 Males
Continued

Centers Below 60% JTM Rate		Centers Above 80% JTM Rate	
Tulsa	50.0%	Woodstock	80.9%
Breckinridge	51.5	Detroit	81.5
Atterbury	35.0%	Mississippi	100.0
		San Jose	83.3%

Centers Below .400 P/JTM Rate		Centers Above .600 P/JTM Rate	
Harpers Ferry	.333	Flatwoods	.649
Pine Knott	.257	Schenck	.600
Oconaluftee	.347	Blackwell	.681
Angell	.359	Ouachita	.717
Marsing	.345	Treasure Lake	.776
Fort Simcoe	.390	Boxelder	.618
New Jersey	.280	Weber Basin	.672
Whitney Young	.214	Timber Lake	.649
Tulsa	.250	Columbia Basin	.663
Kicking Horse	.369	Arecibo	.706
Breckinridge	.306	Keystone	.700
Atterbury	.196	Los Angeles	.750
		Tongue Point	.647
		Mississippi	1.000
		Phoenix	.800
		San Jose	.741

Table F-7-2 is an "exception report" for males for subcluster 07A/27A, Construction Carpenter.

TABLE F-7-2

07A/27A Males

Centers Below 60% Placement Rate		Centers Above 80% Placement Rate	
Jacobs Creek	31.3%	Flatwoods	100.0%
Whitney Young	42.9%	Harpers Ferry	81.3
		Schenck	85.7
		Blackwell	87.0
		Cass	83.3
		Ouachita	100.0
		Treasure Lake	84.0
		Boxelder	85.0
		Collbran	83.2
		Weber Basin	90.0
		Wolf Creek	80.5
		Columbia Basin	90.0
		Arecibo	92.3
		Woodstock	100.0
		Phoenix	85.0
		Hawaii	81.8%

Centers Below 60% JTM Rate		Centers Above 80% JTM Rate	
Flatwoods	47.4%	Blackwell	85.0%
Harpers Ferry	46.2	Ouchita	91.2
Pine Knot	36.4	Treasure Lake	90.5
Schenck	50.0	Trapper Creek	88.9
Jacobs Creek	40.0	Weber Basin	88.9
Great Onyx	56.3	Woodstock	100.0
Oconaluftee	36.4	Cincinnati	100.0%
Mingo	46.7		
Anaconda	50.0		
Marsing	56.5		
Rio Grande	25.0		
Kicking Horse	54.5		
Atterbury	15.4		
Gary	34.4		
Whitney Young	0.0		

Continued-

TABLE F-7-2
07A/27A Males
Continued

Centers Below .400 P/JTM Rate		Centers Above .600 P/JTM Rate	
Harpers Ferry	.375	Golconda	.611
Pine Knot	.218	Cass	.600
Jacobs Creek	.125	Ouachita	.917
Oconaluftee	.222	Treasure Lake	.760
Pine Ridge	.375	Mingo	.615
Mingo	.350	Boxelder	.675
Anaconda	.360	Blackwell	.739
Marsing	.394	Weber Basin	.800
Rio Grande	.167	Columbia	.700
Kicking Horse	.375	Arecibo	.616
Atterbury	.100	Woodstock	1.000
Gary	.234		
Whitney Young	.000		

F.8 Center Variations for Cluster 08 - Electrical Appliance Repair

Table F-8-1 shows the indicators for the major subclusters, 08A, Air Conditioner Repair Mechanic.

TABLE F-8-1

		# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Whitney Young	08A	8	4	50.0%	0	-	-	-
Breckinridge	08A	96	62	64.6	6	9.7%	.063	$2.79
Gary	08A	6	4	66.7	1	25.0	.167	3.00
(Females)		4	2	50.0	0	-	-	-
TOTAL		114	72	63.2%	7	9.7%	.061	$2.82

Thus, the graduates of these three centers were not very successful in obtaining work for which they were trained.

The other subcluster with a significant number of graduates was 08G, Electrician Helper. Table F-8-2 shows the indicators for the subcluster.

TABLE F-8-2

		# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Arecibo	08G	29	26	89.7%	21	80.8%	.724	$2.45
Atlanta	08G	1	1	100.0	1	100.0	1.000	3.00
TOTAL		30	27	90.0%	22	81.5%	.733	$2.48

Thus, while the indicators are very high, the JTM wage is low reflecting the low wage structure of Puerto Rico.

F.9. Center Variations for Cluster 09- Industrial Production

Table F-9-1 shows the indicators for subcluster 09A, Machine Operator. All of the completers from the subscluster were male; the majority were from Clearfield, although Schenck, San Jose, and Gary also had completers.

TABLE F-9-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Clearfield 09A	47	29	61.7%	19	65.5%	.404	$3.26
TOTAL 09A	60	37	61.7	24	64.9	.400	3.42

Table F-9-2 shows the indicators for subcluster 09B, Combination Welder, comparing CCCs, males, Breckinridge and Gary (the two largest centers in this subcluster) and the total for the subcluster.

TABLE F-9-2

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
CCCs 09B	142	120	84.5%	63	53.3%	.444	$3.75
Males 09B	591	428	72.4	244	57.0	.413	3.63
Breckinridge 09B	220	138	62.7	69	50.0	.314	3.58
Gary 09B	184	140	76.1	91	65.0	.495	3.68
TOTAL 09B	606	433	71.5%	247	50.0%	.408	$3.63

For the most part, 09B shows itself to be an excellent vocation for Job Corps graduates. Breckinridge graduates are less likely to be placed in a welding job than most other 09B graduates. In addition, Pine Knot, Treasure Lake, Marsing, New Jersey, and Pittsburgh had low JTM rates.

Table F-9-3 shows the indicators for subcluster 09D, Furniture Upholsterer, by center.

TABLE F-9-3

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Arecibo (M)	21	19	90.5%	17	89.5%	.810	$2.04
Portland (M)	1	1	100.0	1	100.0	1.000	4.00
Gary (M)	26	18	69.2	6	33.3	.231	2.55
Gary (F)	3	1	33.3	1	33.3	.333	2.30
TOTAL 09D	51	39	76.5%	25	64.1%	.490	$2.25

The excellent % placed and %JTM of Arecibo graduates raise this subcluster to above average for these two rates and the P/JTM rate. Conversely, the low JTM wage for Arecibo lowers the wage substantially. In any event, the vocation's indicators are very low, with or without Arecibo.

F.10 Center Variations for Cluster 10 - Transportation

Table F-10-1 displays the center by center indicators for the three subclusters making up cluster 10.

TABLE F-10-1

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10 A Truck Driver							
Anaconda (M)	9	6	66.7%	2	33.3%	.222	$3.15
Fort Simcoe (M)	9	5	55.6	1	20.0	.111	7.73
Kicking Horse (M)	5	3	60.0	-	-	-	-
TOTAL	23	14	60.9%	3	21.4%	.130	$4.67
10B Warehouseman							
McKinney (F)	29	17	58.6%	10	58.8%	.345	$2.69
Gary (M)	21	13	61.9	9	69.2	.428	3.42
TOTAL	50	30	61.9%	19	63.3%	.380	$3.04
10C Forklift Operator							
Keystone (M)	1	1	100.0%	-	-	-	-
Gary (M)	16	16	100.0	4	25.0%	.250	$2.93
TOTAL	17	17	100.0%	4	25.0%	.235	$2.93

F.11 Center Variations for Cluster 11 - Health Occupations

Table F-11-1 displays an "exception report" for women in Cluster 11. Centers with fewer than ten graduates are excluded.

TABLE F-11-1

Centers at or Above 80% Placed		Centers at or Below 60% Placed	
None		Keystone	52.6%
		Blueridge	38.5
		Cleveland	49.0
		Albuquerque	31.7
		McKinney	54.4
		Guthrie	56.9
		Detroit	50.0
		El Paso	38.9
		Phoenix	54.8
		Breckinridge	52.2%

Centers at or Above 80% JTM Rate		Centers at or Below 60% JTM Rate	
Los Angeles	86.5%	Keystone	56.9%
El Paso	85.7	Albuquerque	57.9
Detroit	90.0	Atlanta	55.3%
Tongue Point	87.5%		

Health Occupation is an unusual cluster in that the JTM Rate overall is much higher than the placement rate (68.8% compared to 56.8%). Even more striking is that this holds true for the graduates of every center.

Appendix

APPENDIX

PERFORMANCE INDICATORS BY VOCATIONAL CLUSTER/SUBCLUSTER, BY CENTER, BY SEX

TABLE OF CONTENTS

CLUSTER 01 - SUBPROFESSIONAL 99

CLUSTER 02 - CLERICAL/SALES 105

CLUSTER 03 - SERVICE OCCUPATIONS. 123

CLUSTER 04 - FORESTRY AND FARMING 129

CLUSTER 05 - FOOD SERVICE 133

CLUSTER 06 - AUTO AND MACHINE REPAIR. 143

CLUSTER 07 - CONSTRUCTION TRADES. 165

CLUSTER 08 - ELECTRICAL APPLICANCE REPAIR 189

CLUSTER 09 - INDUSTRIAL PRODUCTION. .199

CLUSTER 10 - TRANSPORTATION 217

CLUSTER 11 - HEALTH OCCUPATIONS 219

CLUSTER 01 - SUBPROFESSIONAL (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
109 Golconda	1	0	0%	-	-	-	-
711 New Jersey	1	1	100.0%	1	100.0%	1.000	3.00
746 Charleston	1	1	100.0%	1	100.0%	1.000	3.00
766 Guthrie	1	1	100.0%	-	-	-	-
741 LA	1	1	100.0%	1	100.0%	1.000	3.70
854 Atlanta	1	1	100.0%	-	-	-	-
442 San Jose	7	6	85.7%	6	100.0%	.857	3.61
446 San Jose	1	1	100.0%	1	100.0%	1.000	4.00
411 Portland	1	0	0	-	-	-	-
907 Rodman	1	0	0	-	-	-	-
906 Breckenridge	14	3	21.4%	-	-	-	-
910 Clearfield	50	28	56.0%	7	25.0%	.140	3.06
TOTAL	80	43	53.8%	17	39.5%	.213	3.37

01-A DRAFTSMAN (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
766 Guthrie	1	1	100.0%	-	-	-	-
442 San Jose	6	5	83.3%	4	80.0%	.667	$3.37
446 San Jose	1	1	100.0%	1	100.0%	1.000	4.00
906 Breckenridge	14	3	21.4%	-	-	-	-
TOTAL	22	10	45.5%	5	50.0%	.277	$3.50

01-B, COMMERCIAL/GRAPHIC ARTIST

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
746 Charleston	1	1	100.0%	1	100.0%	1.00	$3.00

01-C, COSMETOLOGIST (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
711 NJ	1	1	100%	1	100%	1.000	$3.50
854 Atlanta	1	1	100%	-	-	-	-
411 Portland	1	0	0	-	-	-	-
910 Clearfield	1	1	100%	-	-	-	-
TOTAL	4	3	75%	1	33.3%	.250	$3.50

01-X, OTHER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
109 Golconda	1	0	0	-	-	-	-
741 LA	1	1	100.0%	1	100.0%	1.00	3.70
442 San Jose	1	1	100.0%	1	100.0%	1.00	4.00
910 Clearfield	46	24	52.2%	6	25.0%	.130	3.02
TOTAL	49	26	53.1%	8	30.8%	.163	3.23

01, SUBPROFESSIONAL (FEMALES)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
	65	27	41.5%	10	37.0%	.154	2.91
Significant Centers							
Guthrie	41	15	36.6%	4	26.7%	.098	2.94
LA	5	5	60.0%	2	66.7%	.400	3.40
Breckenridge	6	1	16.7%	0	0%	0	0
Atlanta	3	1	33.3%	1	100.0%	.333	2.50
Portland	3	1	33.0%	1	100.0%	.333	2.50
Significant Occs							
01-A Draftsman	46	16	34.8%	3	18.8%	.065	2.91
Guthrie	39	15	38.5%	3	20.0%	.077	2.91
Breckenridge	6	1	16.7%	0	0	0	0
01-C Cosmotologist	15	7	46.7%	2	28.6%	.133	2.40

Offered by 7 centers, none with more than 2 completors.

CLUSTER 01, SUBPROFESSIONAL (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	1	100.0%	-	-	-	-
709 Albuquerque	1	0	0	-	-	-	-
710 McKinney	1	1	100.0%	-	-	-	-
715 Guthrie	41	15	36.6%	4	26.7%	.098	2.94
702 LA	3	2	66.7%	2	100.0%	.667	3.40
742 LA	2	1	50.0%	-	-	-	-
717 Tongue Pt	1	1	100.0%	1	100.0%	1.000	2.50
851 Atlanta	2	1	50.0%	1	100.0%	.500	2.50
853 Atlanta	1	0	0	-	-	-	-
405 Phoenix	1	1	100.0%	-	-	-	-
407 Phoenix	1	1	100.0%	-	-	-	-
415 Portland	1	0	0	-	-	-	-
417 Portland	2	1	50.0%	1	100.0%	.500	2.50
934 Breckenridge	6	1	16.7%	-	-	-	-
926 Atterbury	1	1	100.0%	1	100.0%	1.000	3.00
TOTAL	65	27	41.5%	10	37.0%	.154	2.91

01-A, DRAFTSMAN (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
709 Albuquerque	1	0	0	-	-	-	-
715 Guthrie	39	15	38.5%	3	20.0%	.077	2.91
934 Breckenridge	6	1	16.7%	-	-	-	-
TOTAL	46	16	34.8%	3	18.8%	.065	2.91

01-B, COMMERCIAL/GRAPHIC ARTIST (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
926 Atterbury	1	1	100.0%	1	100.0%	1.00	3.00

01-C, COSMETOLOGIST (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	1	100.0%	-	-	-	-
710 McKinney	1	1	100.0%	-	-	-	-
715 Guthrie	2	0	0	-	-	-	-
702 LA	2	1	50.0%	1	100.0%	.500	2.30
742 LA	1	0	0	-	-	-	-
851 Atlanta	2	1	50.0%	1	100.0%	.500	2.50
853 Atlanta	1	0	0	-	-	-	-
405 Phoenix	1	1	100.0%	-	-	-	-
407 Phoenix	1	1	100.0%	-	-	-	-
415 Portland	1	0	0	-	-	-	-
417 Portland	2	1	50.0%	-	-	-	-
TOTAL	17	7	41.2%	2	28.6%	.118	2.40

01-G, FASHION ARTIST (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
702 LA	1	1	100.0%	1	100.0%	1.00	4.50

01-X, OTHER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
742 LA	1	1	100.0%	-	-	-	-

CLUSTER 02, CLERICAL/SALES (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
082 Blackwell	1	1	100.0%	1	100.0%	1.000	3.50
051 Pine Ridge	11	5	45.4%	1	20.0%	.091	3.50
046 Trapper Creek	5	3	60.0%	2	66.7%	.400	3.80
088 Box Elder	2	2	100.0%	-	-	-	-
172 Anaconda	7	6	85.7%	3	50.0%	.429	2.56
243 Collbran	1	1	100.0%	-	-	-	-
323 Weber Basin	4	2	50.0%	1	50.0%	.250	4.10
064 Timberlake	8	6	75.0%	4	66.7%	.500	2.63
078 Curlew	7	4	57.1%	1	25.0%	.143	2.30
145 Wolf Creek	4	4	100.0%	2	50.0%	.500	2.79
340 Ft. Simcoe	8	5	62.5%	4	80.0%	.500	3.53
770 Keystone	3	0	0	-	-	-	-
737 Cleveland	5	5	100.0%	4	80.0%	.800	5.86
754 Albuquerque	3	0	0	-	-	-	-
750 Excelsior Springs	1	1	100.0%	1	100.0%	1.000	3.00
751 Excelsior Springs	18	17	94.4%	15	88.2%	.833	5.25
740 LA	6	5	83.3%	4	80.0%	.667	6.15
741 LA	18	17	94.4%	15	88.2%	.833	5.88
776 Tongue Pt	9	7	77.8%	5	71.4%	.556	5.34
831 Woodstock	1	1	100.0%	1	100.0%	1.000	2.30
431 Detroit	2	0	0	-	-	-	-
461 Minn Ext Center	1	1	100.0%	1	100.0%	1.000	5.35
816 Cincinnati	5	5	100.0%	1	20.0%	.200	2.75
819 Cincinnati	2	1	50.0%	-	-	-	-
857 Tulsa	24	15	67.5%	8	53.3%	.333	2.88
859 Tulsa	9	6	66.7%	5	83.3%	.556	2.71
840 Kicking Horse	15	9	60.0%	7	77.8%	.467	3.10
401 Phoenix	3	3	100.0%	2	66.7%	.667	2.25
403 Phoenix	5	4	80.0%	1	25.0%	.200	5.89
442 San Jose	2	1	50.0%	-	-	-	-
446 San Jose	46	31	67.4%	24	77.4%	.522	3.07
806 Hawaii	5	4	80.0%	3	75.0%	.600	2.48
413 Portland	5	2	40.0%	2	100.0%	.400	2.65
418 Portland	1	1	100.0%	1	100.0%	1.000	3.10
906 Breckenridge	23	11	47.8%	7	63.6%	.304	3.74
905 Atterbury	26	17	65.4%	14	82.4%	.534	4.60
903 Gary	14	5	35.7%	4	80.0%	.286	2.87
910 Clearfield	6	4	66.7%	3	75.0%	.500	4.26
746 Charleston	1	1	100.0%	1	100.0%	1.000	5.50
TOTAL	317	214	67.5%	149	69.6%	.470	3.99

02-A, CLERK TYPIST (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
737 Cleveland	4	4	100.0%	-	-	-	-
754 Albuquerque	2	0	0	-	-	-	-
750 Excelsior Springs	1	1	100.0%	1	100.0%	1.000	3.00
740 LA	6	5	83.3%	4	80.0%	.667	6.09
741 LA	17	16	94.1%	10	62.5%	.588	6.29
831 Woodstock	1	1	100.0%	1	100.0%	1.000	2.30
431 Minn Ext Center	1	1	100.0%	1	100.0%	1.000	5.35
857 Tulsa	5	3	60.0%	-	-	-	-
840 Kicking Horse	14	8	57.1%	5	62.5%	.357	2.50
403 Phoenix	2	2	100.0%	-	-	-	-
442 San Jose	1	0	0	-	-	-	-
446 San Jose	14	9	64.3%	7	77.8%	.500	3.03
806 Hawaii	4	3	75.0%	2	66.7%	.500	2.30
413 Portland	5	2	40.0%	2	100.0%	.400	2.65
418 Portland	1	1	100.0%	1	100.0%	1.000	3.10
906 Breckenridge	13	6	46.2%	4	66.7%	.308	4.20
905 Atterbury	13	10	76.9%	7	70.0%	.538	3.96
903 Gary	4	1	25.0%	1	100.0%	.250	2.75
910 Clearfield	3	2	66.7%	1	50.0%	.338	3.50
431 Detroit	1	0	0	-	-	-	-
TOTAL	112	75	67.0%	47	62.7%	.420	4.16

02-B, OFFICE MACHINE OPERATOR (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
064 Timber Lake	1	1	100.0%	1	100.0%	1.000	2.50

02-C, DUPLICATING MACHINE OPERATOR

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
446 San Jose	1	0	0	-	-	-	-
905 Atterbury	1	1	100.0%	1	100.0%	1.000	3.44
TOTAL	2	1	50.0%	1	100.0%	.500	3.44

02-D, KEYPUNCH OPERATOR (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
751 Excelsior Springs	12	12	100.0%	9	75.0%	.750	4.98
741 LA	1	1	100.0%	1	100.0%	1.000	2.79
857 Tulsa	1	1	100.0%	1	100.0%	1.000	3.00
903 Gary	6	3	50.0%	2	66.7%	.333	2.87
906 Breckenridge	1	1	100.0%	1	100.0%	1.000	3.83
TOTAL	21	18	85.7%	14	77.8%	.667	4.30

02-E, STOCK CLERK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
051 Pine Ridge	11	5	45.5%	1	20.0%	.091	3.50
046 Trapper Creek	5	3	60.0%	22	66.7%	.400	3.50
088 Boxelder	2	2	100.0%	-	-	-	-
172 Anaconda	7	6	85.7%	3	50.0%	.429	2.56
243 Collbran	1	1	100.0%	-	-	-	-
373 Weber Basin	4	2	50.0%	1	50.0%	.250	4.10
064 Timber Lake	7	5	71.4%	3	6010%	.428	2.68
078 Curlew	7	4	57.1%	1	25.0%	.143	2.30
145 Wolf Creek	4	4	100.0%	2	50.0%	.500	3.79
340 Ft. Simcoe	8	5	67.5%	4	80.0%	.500	3.53
840 Kicking Horse	1	1	100.0%	-	-	-	-
806 Hawaii	1	1	100.0%	1	100.0%	1.000	2.85
TOTAL	58	39	67.2%	18	46.2%	.310	3.21

02-F, RETAIL SALES CLERK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
754 Albuquerque	1	0	0	-	-	-	-

02-G, ACCOUNTING CLERK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
770 Keystone	1	0	0	-	-	-	-
401 Phoenix	1	1	100.0%	1	100.0%	1.000	2.50
905 Atterbury	5	0	0	-	-	-	-
TOTAL	7	1	14.3%	1	100.0%	.147	2.50

02-H, SECRETARY (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	2	2	100.0%	2	100.0%	1.000	2.96
859 Tulsa	2	2	100.0%	1	50.0%	.500	3.13
446 San Jose	1	1	100.0%	1	100.0%	1.000	3.35
TOTAL	5	5	100.0%	4	80.0%	.800	3.10

02-I, BOOKKEEPER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
903 Gary	4	1	25.0%	1	100.0%	.250	3.00
910 Clearfield	1	1	100.0%	1	100.0%	1.000	2.50
TOTAL	5	2	40.0%	2	100.0%	.400	2.75

02-J, CALCULATING MACHINE OPERATOR (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
446 San Jose	1	1	100.0%	1	100.0%	1.000	3.40

02-K, MAIL CLERK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
401 Phoenix	2	2	100.0%	-	-	-	-
403 Phoenix	3	2	66.7%	-	-	-	-
TOTAL	5	4	80.0%	-	-	-	-

02-L, CASHIER/CHECKER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	1	0	0	-	-	-	-
906 Breckenridge	9	4	44.0%	1	25.0%	.111	2.30
TOTAL	10	4	40.0%	1	25.0%	.100	2.30

02-M, CLERK, GENERAL (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
776 Tongue Pt	2	0	0	-	-	-	-
816 Cincinnati	5	5	100.0%	1	20.0%	.200	2.25
818 Cincinnati	2	1	50.0%	-	-	-	-
857 Tulsa	1	0	0	-	-	-	-
859 Tulsa	1	0	0	-	-	-	-
446 San Jose	1	1	100.0%	1	100.0%	1.000	2.50
905 Atterbury	1	1	100.0%	1	100.0%	1.000	3.00
TOTAL	13	8	61.5%	3	37.5%	.231	2.58

02-O, MEDICAL SECRETARY (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	1	1	100.0%	1	100.0%	1.000	3.20

02-P, RECEPTIONIST (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	4	1	25.0%	-	-	-	-
859 Tulsa	3	2	66.7%	-	-	-	-
TOTAL	7	3	42.9%	-	-	-	-

02-R, STENOGRAPHER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	2	1	50.0%	-	-	-	-
859 Tulsa	2	1	50.0%	1	100.0%	.500	2.30
910 Clearfield	1	0	0	-	-	-	-
TOTAL	5	2	40.0%	1	50.0%	.200	2.30

02-S, TELEWRITER/TWX OPERATOR (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	1	0	0	-	-	-	-
859 Tulsa	1	1	100.0%	1	100.0%	1.000	2.75
TOTAL	2	1	50.0%	1	100.0%	.500	2.75

02-T, TELEPHONE OPERATOR (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
770 Keystone	2	0	0	-	-	-	-
776 Tongue Pt	4	4	100.0%	2	50.0%	.500	3.55
446 San Jose	1	0	0	-	-	-	-
TOTAL	7	4	57.1%	2	50.0%	.286	3.55

02-W, WARD CLERK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
431 Detroit	1	0	0	-	-	-	-
905 Atterbury	1	0	0	-	-	-	-
TOTAL	2	0	0	-	-	-	-

02-X, OTHER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
082 Blackwell	1	1	100.0%	1	100.0%	1.000	3.50
737 Cleveland	1	1	100.0%	1	100.0%	1.000	6.25
442 San Jose	1	1	100.0%	-	-	-	-
346 San Jose	26	18	69.2%	8	44.4%	.307	2.99
905 Atterbury	3	3	100.0%	3	100.0%	1.000	7.00
910 Clearfield	1	1	100.0%	1	100.0%	1.000	6.80
746 Charleston	1	1	100.0%	1	100.0%	1.000	5.50
751 Excelsior Springs	6	5	83.3%	5	100.0%	.833	6.27
776 Tongue Pt	3	3	100.0%	1	100.0%	1.000	6.53
TOTAL	43	34	79.1%	21	61.8%	.488	5.00

CLUSTER 02, CLERICAL/SALES (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	57	36	63.2%	27	75.0%	.474	3.49
716 Keystone	104	52	50.0%	34	65.4%	.327	2.84
720 Blue Ridge	45	34	75.6%	19	55.9%	.423	2.42
743 Charleston	6	3	50.0%	2	66.7%	.333	2.98
701 Cleveland	115	69	60.0%	54	78.3%	.470	3.26
738 Cleveland	3	3	100.0%	3	100.0%	1.000	3.65
709 Albuquerque	112	48	42.9%	28	58.3%	.250	2.60
710 McKinney	216	128	63.9%	80	62.5%	.399	2.60
715 Guthrie	75	27	36.0%	19	70.4%	.253	2.54
756 Albuquerque	3	2	66.7%	1	50.0%	.333	2.30
706 Excelsior Springs	63	39	61.9%	22	56.4%	.349	4.22
702 LA	72	49	68.1%	40	81.6%	.556	3.42
742 LA	23	18	78.3%	17	94.4%	.739	3.65
717 Tongue Point	94	64	68.1%	49	76.6%	.521	4.05
851 Atlanta	37	18	48.6%	10	55.6%	.270	2.75
853 Atlanta	20	11	55.0%	9	81.8%	.450	2.95
437 Detroit	22	4	18.2%	1	25.0%	.046	2.50
845 Cincinnati	10	4	40.0%	3	75.0%	.300	2.36
849 El Paso	1	1	100.0%	1	100.0%	1.000	2.60
856 Tulsa	2	2	100.0%	2	100.0%	1.000	4.69
405 Phoenix	26	15	57.7%	13	86.7%	.500	2.49
407 Phoenix	44	25	56.8%	18	72.0%	.409	2.46
447 San Jose	1	1	100.0%	1	100.0%	1.000	3.25
807 Hawaii	13	11	84.6%	11	100.0%	.846	3.03
415 Portland	15	9	60.0%	7	77.8%	.467	3.02
417 Portland	4	3	75.0%	3	100.0%	.750	3.31
934 Breckenridge	104	42	40.4%	10	23.8%	.096	2.41
926 Atterbury	12	9	75.0%	6	66.7%	.500	2.53
914 Gary	21	11	52.4%	9	81.8%	.429	2.80
TOTAL	1,320	738	58.2%	499	67.6%	.378	2.98

02-A, CLERK-TYPIST (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	22	12	54.5%	8	66.7%	.364	3.11
716 Keystone	36	18	50.0%		72.2%	.361	3.18
720 Blue Ridge	5	4	80.0%	1	25.0%	.200	2.60
743 Charleston	2	1	50.0%	1	100.0%	.500	3.50
701 Cleveland	55	35	63.6%	20	57.1%	.364	3.37
738 Cleveland	2	2	100.0%	-	-	-	-
709 Albuquerque	63	21	33.3%	11	52.4%	.174	2.66
710 McKinney	46	29	63.0%	20	69.0%	.435	2.65
715 Guthrie	21	10	47.6%	8	80.0%	.381	2.71
756 Albuquerque	1	0	0	-	-	-	-
706 Excelsior Springs	15	8	53.3%	2	25.0%	.133	2.30
702 LA	50	33	66.0%	15	45.5%	.300	3.56
742 LA	13	12	92.3%	6	50.0%	.462	4.38
717 Tongue Point	29	19	65.5%	10	52.6%	.345	3.94
851 Atlanta	17	8	47.1%	3	37.5%	.176	2.95
853 Atlanta	6	2	33.3%	1	50.0%	.167	3.50
437 Detroit	11	3	27.3%	1	33.3%	.091	2.50
856 Tulsa	1	1	100.0%	1	100.0%	1.000	6.26
405 Phoenix	8	5	67.5%	2	40.0%	.250	2.55
407 Phoenix	12	9	75.0%	4	44.4%	.333	2.47
447 San Jose	1	1	100.0%	-	-	-	-
807 Hawaii	13	11	84.6%	9	81.8%	.692	3.05
415 Portland	15	9	60.0%	6	66.7%	.400	3.03
417 Portland	4	3	75.0%	2	66.7%	.500	3.44
934 Breckenridge	64	24	37.5%	5	20.8%	.078	2.40
926 Atterbury	8	6	75.0%	3	50.0%	.375	2.53
914 Gary	7	4	57.1%	3	75.0%	.429	2.95
TOTAL	523	286	54.7%	151	52.8%	.289	3.05

02-B, OFFICE MACHINE OPERATOR (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
709 Albuquerque	2	2	100.0%	1	50.0%	.500	2.97

02-D, KEYPUNCH OPERATOR (FEMALE

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	3	1	33.3%	1	100.0%	.333	2.85
716 Keystone	30	15	50.0%	5	33.3%	.167	2.72
743 Charleston	1	0	0	-	-	-	-
701 Cleveland	18	10	55.6%	6	60.0%	.333	3.37
738 Cleveland	1	1	100.0%	1	100.0%	1.000	2.60
709 Albuquerque	11	3	27.3%	2	66.7%	.182	2.65
710 McKinney	26	21	80.8%	11	52.4%	.423	2.95
715 Guthrie	5	2	40.0%	2	100.0%	.400	2.40
756 Albuquerque	1	1	100.0%	1	100.0%	1.000	2.30
706 Excelsior Springs	7	7	100.0%	7	100.0%	1.000	6.23
702 LA	2	2	100.0%	2	100.0%	1.000	3.41
742 LA	2	1	50.0%	-	-	-	-
849 El Paso	1	1	100.0%	1	100.0%	1.000	2.60
914 Gary	9	5	55.6%	3	60.0%	.333	3.05
717 Tongue Point	1	1	100.0%	1	100.0%	1.000	3.83
TOTAL	118	71	60.2%	43	60.6%	.364	3.49

02-E, STOCK CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
709 Albuquerque	1	1	100.0%	-	-	-	-
710 McKinney	22	11	50.0%	4	36.4%	.182	2.32
TOTAL	23	12	52.2%	4	33.3%	.174	2.32

02-F, RETAIL SALES CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
720 Blue Ridge	23	18	78.3%	7	38.9%	.305	2.54
709 Albuquerque	22	13	59.1%	3	23.1%	.136	2.36
710 McKinney	19	9	47.4%	3	33.3%	.142	2.40
756 Albuquerque	1	1	100.0%	-	-	-	-
TOTAL	65	41	63.1%	13	31.7%	.200	2.47

02-G, ACCOUNTING CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	5	2	40.0%	1	50.0%	.200	2.76
710 McKinney	10	5	50.0%	2	40.0%	.200	2.66
702 LA	3	3	100.0%	2	66.7%	.667	2.40
717 Tongue Point	12	6	50.0%	4	66.7%	.333	2.98
856 Tulsa	1	1	100.0%	1	100.0%	1.000	3.12
407 Phoenix	1	1	100.0%	1	100.0%	1.000	2.30
926 Atterbury	3	2	66.7%	1	50.0%	.333	2.50
TOTAL	35	20	57.1%	12	60.0%	.343	2.73

02-H, SECRETARY (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
851 Atlanta	13	7	53.8%	5	71.4%	.384	2.62
853 Atlanta	12	7	58.3%	5	71.4%	.416	2.89
TOTAL	25	14	56.0%	10	71.4%	.400	2.76

02-I, BOOKKEEPER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	1	1	100.0%	1	100.0%	1.000	3.00
709 Albuquerque	4	1	25.0%	-	-	-	-
914 Gary	3	1	33.3%	-	-	-	-
TOTAL	8	3	37.5%	1	33.3%	.125	3.00

02-K, MAIL CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
405 Phoenix	18	10	55.5%	4	40.0%	.222	2.42
407 Phoenix	31	15	48.4%	3	20.0%	.097	2.55
TOTAL	49	25	51.0%	7	28.0%	.143	2.48

02-L, CASHIER/CHECKER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	14	8	57.1%	4	50.0%	.286	2.70
720 Blue Ridge	4	3	75.0%	-	-	-	-
743 Charleston	1	0	0	-	-	-	-
701 Cleveland	11	5	45.5%	3	60.0%	.273	2.72
710 McKinney	32	19	59.4%	6	31.6%	.188	2.61
702 LA	2	1	50.0%	1	100.0%	.500	2.60
742 LA	1	1	100.0%	1	100.0%	1.000	3.00
717 Tongue Point	2	1	50.0%	-	-	-	-
934 Breckenridge	40	18	45.0%	4	22.2%	.100	2.42
926 Atterbury	1	1	100.0%	1	100.0%	1.000	2.80
TOTAL	108	57	52.8%	20	35.1%	.185	2.64

02-M, CLERK, GENERAL (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
709 Albuquerque	2	1	50.0%	1	100.0%	.500	3.10
710 McKinney	22	11	50.0%	8	72.7%	.364	2.70
715 Guthrie	10	4	40.0%	-	-	-	-
706 Excelsior Springs	2	1	50.0%	1	100.0%	.500	2.30
702 LA	8	4	50.0%	-	-	-	-
742 LA	3	1	33.3%	-	-	-	-
717 Tongue Point	22	13	59.1%	4	30.8%	.182	2.57
851 Atlanta	7	3	42.9%	-	-	-	-
853 Atlanta	2	2	100.0%	1	50.0%	.500	2.95
845 Cincinnati	10	4	40.0%	2	50.0%	.200	2.40
TOTAL	88	42	47.7%	17	40.5%	.193	2.65

02-N, CREDIT CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
710 McKinney	19	11	57.9%	6	54.5%	.316	2.65

02-O, MEDICAL SECRETARY (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
720 Blue Ridge	6	5	83.3%	-	-	-	-
742 LA	1	0	0	-	-	-	-
437 Detroit	2	0	0	-	-	-	-
TOTAL	9	5	55.6%	-	-	-	-

02-P, RECEPTIONIST (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	6	3	50.0%	1	33.3%	.167	2.10
715 Guthrie	39	11	28.2%	4	36.4%	.103	2.55
706 Excelsior Springs	23	11	47.8%	2	18.2%	.087	2.72
742 LA	1	1	50.0%	-	-	-	-
TOTAL	69	26	37.7%	7	26.9%	.101	2.53

02-R, STENOGRAPHER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	7	1	14.3%	1	100.0%	.143	3.00
709 Albuquerque	5	5	100.0%	-	-	-	-
717 Tongue Point	2	2	100.0%	1	50.0%	.500	2.87
914 Gary	2	1	50.0%	1	100.0%	.500	2.62
TOTAL	16	9	56.3%	3	33.3%	.188	2.83

02-T, TELEPHONE OPERATOR (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	15	8	53.3%	-	-	-	-
702 LA	3	3	100.0%	2	66.7%	.667	2.93
742 LA	1	1	100.0%	-	-	-	-
717 Tongue Point	7	[illegible]	42.9%	2	66.7%	.286	3.10
TOTAL	26	15	57.7%	4	26.7%	.154	3.02

02-W, WARD CLERK (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	2	1	50.0%	-	-	-	-
720 Blue Ridge	7	4	57.2%	1	25.0%	.143	2.30
701 Cleveland	7	2	100.0%	1	50.0%	.500	2.80
710 McKinney	19	12	63.2%	2	16.7%	.105	2.37
706 Excelsior Springs	1	0	0	-	-	-	-
717 Tongue Point	1	1	100.0%	1	100.0%	1.000	2.70
437 Detroit	9	1	11.1%	-	-	-	-
TOTAL	41	21	51.2%	5	23.8%	.122	2.51

02-X, OTHER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	7	5	71.4%	4	60.0%	.429	4.52
716 Keystone	9	7	77.8%	4	57.1%	.444	2.58
743 Charleston	1	1	100.0%	1	100.0%	1.000	2.47
701 Cleveland	17	9	52.9%	7	77.8%	.412	3.58
709 Albuquerque	2	1	50.0%	-	-	-	-
706 Excelsior Springs	10	7	70.0%	2	28.6%	.200	2.62
702 LA	4	3	75.0%	2	66.7%	.500	3.27
742 LA	1	1	100.0%	1	100.0%	1.000	3.00
717 Tongue Pt	1	1	100.0%	-	-	-	-
TOTAL	52	35	67.3%	21	60.0%	.404	3.37

CLUSTER 03, SERVICE OCCUPATIONS (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
350 Harpers Ferry	4	2	50.0%	1	50.0%	.250	3.62
031 Pine Knot	17	6	35.3%	1	16.7%	.059	7.60
058 LBJ	10	8	80.0%	2	25.0%	.200	2.60
059 Schenck	19	12	63.2%	3	25.0%	.158	2.59
070 Jacobs Creek	6	4	66.7%	2	50.0%	.333	2.55
258 Great Onyx	6	3	50.0%	1	33.0%	.167	3.00
300 Oconoluftee	10	7	70.0%	4	57.1%	.400	2.66
082 Blackwell	7	2	28.6%	2	100.0%	.280	2.70
109 Golconda	5	4	80.0%	1	25.0%	.200	2.50
009 Cass	11	10	90.9%	6	40.0%	.546	2.20
098 Ouachita	3	2	66.7%	1	50.0%	.333	4.32
305 Treasure Lake	4	3	75.0%	1	33.3%	.250	2.50
051 Pine Ridge	9	3	33.3%	-	-	-	-
046 Trapper Creek	4	4	100.0%	3	75.0%	.750	2.48
088 Boxelder	4	3	75.0%	3	100.0%	.750	2.30
172 Anaconda	3	1	33.3%	1	100.0%	.333	2.30
243 Collbran	15	9	60.0%	6	66.7%	.400	3.17
323 Weber Basin	13	7	53.8%	3	42.9%	.231	3.33
064 Timber Lake	20	16	80.0%	8	50.0%	.400	2.94
078 Curlew	10	8	80.0%	4	50.0%	.400	3.40
145 Wolf Creek	17	14	82.4%	7	50.0%	.412	3.32
251 Marsing	9	8	88.9%	4	75.0%	.667	2.54
340 Fort Simcoe	4	1	25.0%	-	-	-	-
343 Columbia Basin	9	6	66.7%	2	33.3%	.222	3.75
754 Albuquerque	6	2	33.3%	1	50.0%	.167	2.50
776 Tongue Point	8	4	50.0%	2	50.0%	.250	3.00
831 Woodstock	1	1	100.0%	-	-	-	-
836 Whitney Young	3	3	100.0%	2	66.7%	.667	3.59
852 Atlanta	1	1	100.0%	1	100.0%	1.000	2.90
816 Cincinnati	23	15	65.2%	9	60.0%	.391	2.41
818 Cincinnati	2	0	0	-	-	-	-
811 El Paso	22	16	72.7%	11	68.8%	.500	2.47
813 El Paso	2	2	100.0%	2	100.0%	1.000	2.47
857 Tulsa	1	1	100.0%	1	100.0%	1.000	2.50
840 Kicking Horse	2	0	0	-	-	-	-
442 San Jose	23	17	73.9%	14	82.4%	.609	3.30
443 San Jose	1	1	100.0%	1	100.0%	1.000	3.00
446 San Jose	1	0	0	-	-	-	-
806 Hawaii	5	3	60.0%	2	66.7%	.400	3.14
906 Breckenridge	1	0	0	-	-	-	-
905 Atterbury	130	70	53.8%	36	51.4%	.277	2.88
903 Gary	47	36	76.6%	19	52.8%	.404	2.68
910 Clearfield	157	98	62.4%	44	44.9%	.280	2.82
TOTAL	655	413	63.1%	211	51.1%	.322	2.84

03-A, LAUNDRY/MACHINE WORKER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
905 Atterbury	1	0	0	-	-	-	-

03B, CUSTODIAL MAINTENANCE (MALES)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
350 Harpers Ferry	4	2	50.0%	1	50.0%	.250	3.62
031 Pine Knot	17	6	35.0%	1	16.7%	.060	2.60
058 LBJ	10	8	80.0%	2	25.0%	.200	2.60
059 Schenck	19	12	24.0%	2	16.7%	.040	2.73
070 Jacobs Creek	6	4	66.7%	2	50.0%	.333	2.55
258 Great Onyx	6	3	50.0%	1	33.0%	.250	3.00
300 Oconoluftee	8	6	75.0%	3	50.0%	.375	2.88
082 Blackwell	7	2	28.6%	2	100.0%	.286	2.70
109 Golconda	5	4	80.0%	1	25.0%	.200	2.50
009 Cass	11	10	91.0%	2	20.0%	.180	2.30
098 Ouachita	3	2	66.7%	1	50.0%	.333	4.32
305 Treasure Lke	4	3	75.0%	1	33.3%	.250	2.50
051 Pine Ridge	9	3	33.3%	-	-	-	-
046 Trapper Creek	4	4	100.0%	2	50.0%	.500	2.72
088 Boxelder	4	3	75.0%	3	100.0%	.750	2.30
172 Anaconda	3	1	33.3%	1	100.0%	.330	2.30
243 Collbran	15	9	60.0%	6	66.7%	.400	3.17
323 Weber Basin	13	7	54.0%	3	42.9%	.232	3.33
064 Timber Lake	20	16	80.0%	5	31.3%	.250	3.11
078 Curlew	10	8	80.0%	4	50.0%	.400	3.40
145 Wolf Creek	17	14	82.4%	6	42.9%	.353	3.37
251 Marsing	9	8	88.9%	6	75.0%	.667	2.54
340 Fort Simcoe	4	1	25.0%	-	-	-	-
343 Columbia Basin	9	6	66.7%	2	33.3%	.222	3.75
754 Albuquerque	5	2	40.0%	1	50.0%	.200	2.50
776 Tongue Point	8	4	50.0%	-	-	-	-
831 Woodstock	1	1	100.0%	-	-	-	-
836 Whitney Young	3	3	100.0%	-	-	-	-
816 Cincinnati	23	15	65.2%	7	46.7%	.305	2.38
811 El Paso	22	16	72.7%	9	56.3%	.409	2.47
813 El Paso	2	2	100.0%	2	100.0%	1.000	2.47
540 Kicking Horse	2	0	0	-	-	-	-
442 San Jose	9	6	66.7%	5	83.3%	.556	3.20
446 San Jose	1	0	0	-	-	-	-
806 Hawaii	5	3	60.0%	-	-	-	-
906 Breckenridge	1	0	0	-	-	-	-
905 Atterbury	129	70	54.3%	29	41.4%	.225	2.87
903 Gary	47	36	76.6%	16	44.4%	.340	2.73
910 Clearfield	157	98	62.4%	36	36.7%	.229	2.86
TOTAL	634	398	62.8%	162	40.7%	.227	2.84

03-F, MAID, GENERAL (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
857 Tulsa	1	1	100.0%	1	100.0%	1.000	2.50

03-K, TEACHER, NURSERY SCHOOL (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
754 Albuquerque	1	0	0	-	-	-	-

03-X, OTHER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
300 Oconaluftee	2	1	50.0%	-	-	-	-
852 Atlanta	1	1	100.0%	1	100.0%	1.000	2.90
442 San Jose	14	1	78.6%	9	81.8%	.643	3.36
443 San Jose	1	1	100.0%	1	100.0%	1.000	3.00
TOTAL	18	13	77.2%	11	84.6%	.611	3.29

CLUSTER 03, SERVICE OCCUPATIONS (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	2	2	100.0%	1	50.0%	.500	2.40
701 Cleveland	3	2	66.7%	2	100.0%	.667	2.65
738 Cleveland	1	1	100.0%	-	-	-	-
709 Albuquerque	7	5	71.4%	1	20.0%	.143	2.30
715 Guthrie	40	19	47.5%	8	42.1%	.200	2.23
702 LA	5	3	60.0%	1	33.3%	.200	2.70
717 Tongue Pt	14	6	42.9%	4	66.7%	.286	2.92
851 Atlanta	1	1	100.0%	-	-	-	-
853 Atlanta	1	0	0	-	-	-	-
926 Atterbury	3	2	66.7%	1	50.0%	.333	2.30
TOTAL	77	41	53.2%	18	43.9%	.234	2.47

03-A, LAUNDRY/MACHINE WORKER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	1	100.0%	-	-	-	-
701 Cleveland	1	1	100.0%	1	100.0%	1.000	3.30
715 Guthrie	1	0	0	-	-	-	-
717 Tongue Pt	2	0	0	-	-	-	-
TOTAL	5	2	40.0%	1	50.0%	.200	3.30

03-B, CUSTODIAL MAINTENANCE (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
717 Tongue Pt	8	6	75.0%	4	66.7%	.500	2.92
926 Atterbury	3	2	66.7%	1	50.0%	.333	2.30
TOTAL	11	8	72.7%	5	62.5%	.455	2.80

03-F, MAID, GENERAL (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	0	100.0%	-	-	-	-

03-H, PATROLMAN/POLICEMAN (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
702 LA	2	0	0	-	-	-	-

03-J, TEACHER AIDE (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	2	1	50.0%	1	50.0%	.250	2.00
709 Albuquerque	5	3	60.0%	-	-	-	-
853 Atlanta	1	0	0	-	-	-	-
TOTAL	8	4	50.0%	1	25.0%	.175	2.00

03-K, TEACHER, NURSERY SCHOOL (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
738 Cleveland	1	1	100.0%	-	-	-	-
709 Albuquerque	1	1	100.0%	-	-	-	-
715 Guthrie	39	19	48.7%	6	31.6%	.154	2.25
702 LA	2	2	100.0%	1	50.0%	.500	2.70
717 Tongue Pt	3	0	0	-	-	-	-
TOTAL	46	23	50.0%	7	30.4%	.152	2.31

03-X, OTHER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
709 Albuquerque	1	1	100.0%	1	100.0%	1.00	2.30
702 LA	1	1	100.0%	-	-	-	-
717 Tongue Pt	1	0	0	-	-	-	-
851 Atlanta	1	0	100.0%	-	-	-	-
TOTAL	4	3	75.0%	1	33.3%	.250	2.30

CLUSTER 04, FORESTRY AND FARMING (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
172 Anaconda	1	1	100.0%	-	-	-	-
064 Timber Lake	2	1	50.0%	-	-	-	-
078 Curlew	15	13	86.7%	10	76.9%	.666	3.50
144 Angell	27	22	81.5%	15	68.2%	.556	3.61
145 Wolf Creek	66	58	87.9%	44	75.9%	.667	3.26
801 NJ	2	1	50.0%	-	-	-	-
857 Tulsa	1	0	0	-	-	-	-
840 Kicking Horse	11	5	45.5%	2	40.0%	.182	2.93
411 Portland	6	4	66.7%	1	25.0%	.167	2.40
413 Portland	2	2	100.0%	1	50.0%	.500	2.50
906 Breckenridge	50	24	48.0%	6	25.0%	.120	2.67
904 Parks	1	1	100.0%	-	-	-	-
TOTAL	184	132	71.7%	79	59.9%	.429	3.28

04-B, NURSERY WORKER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
064 Timber Lake	2	1	50.0%	-	-	-	-
801 NJ	2	1	50.0%	-	-	-	-
857 Tulsa	1	0	0	-	-	-	-
411 Portland	6	4	66.7%	1	25.0%	.167	2.40
413 Portland	2	2	100.0%	1	50.0%	.500	2.50
906 Breckenridge	50	24	48.0%	6	25.0%	.120	2.67
904 Parks	1	1	100.0%	-	-	-	-
TOTAL	64	33	51.6%	8	24.2%	.125	2.62

04-C, FORESTRY AND CONSERVATION (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
172 Anaconda	1	1	100.0%	-	-	-	-
078 Curlew	15	13	86.7%	10	76.9%	.667	3.50
144 Angell	26	21	80.8%	13	61.9%	.500	3.20
145 Wolf Creek	66	58	87.9%	40	69.0%	.606	3.30
840 Kicking Horse	11	5	45.5%	2	40.0%	.182	2.93
TOTAL	119	98	82.4%	65	66.3%	.546	3.30

04, FORESTRY AND FARMING (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
Total	32	24	75.0%	14	58.0%	.438	3.45
04-B, NURSERY WORKER							
Portland (R)	8	6	75.0%	4	66.7%	.5000	2.82
Portland (NR)	4	4	100.0%	3	75.0%	.750	2.21
Breckenridge	5	0	0	-	-	-	-
04-C, FORESTRY AND CONSERVATION							
Angell	15	14	93.3%	6	42.9%	.400	4.06

CLUSTER 04, FORESTRY AND FARMING (FEMALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	15	14	93.3%	6	42.9%	.400	4.06
415 Portland	8	6	75.0%	5	83.3%	.625	3.46
417 Portland	4	4	100.0%	3	75.0%	.750	2.21
934 Breckenridge	5	0	0	-	-	-	-
TOTAL	32	24	75.0%	14	58.0%	.438	3.45

04-B, NURSERY WORKER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
415 Portland	8	6	75.0%	4	66.7%	.500	2.82
417 Portland	4	4	100.0%	3	75.0%	.750	2.21
934 Breckenridge	5	0	0	-	-	-	-
TOTAL	17	10	58.8%	7	70.0%	.412	2.56

04-C, FORESTRY AND CONSERVATION (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	15	14	93.3%	6	42.9%	.400	4.06

05, FOOD SERVICE (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	12	12	100.0%	5	41.7%	.417	-
350 Harpers Ferry	5	4	80.0%	3	75.0%	.600	2.95
031 Pine Knot	/15	7	.467%	4	57.1%	.266	2.22
058 Lyndon Johnson	7	6	.857%	4	66.7%	.571	-
059 Schenck	11	8	72.7%	6	75.0%	.545	3.05
070 Jacobs Creek	8	7	87.5%	3	42.9%	.375	2.86
258 Great Onyx	15	9	60.0%	5	55.6%	.334	2.46
300 Oconaluftee	15	10	66.7%	6	60.0%	.400	2.34
040 Lydick Lake	1	1	100.0%	0	0	0	0
082 Blackwell	11	4	36.4%	2	50.0%	.182	3.00
109 Golconda	66	2	33.3%	2	100.0%	.333	2.52
009 Cassadaga	11	8	72.7%	4	50.0%	.364	-
098 Ouchita	9	9	100.0%	5	55.6%	.556	2.58
305 Treasure Lake	16	15	93.8%	12	80.0%	.750	-
051 Pine Ridge	10	4	40.0%	3	75.0%	.300	3.00
270 Mingo	15	11	73.3%	10	90.9%	.667	3.28
046 Trapper Creek	15	9	60.0%	3	33.3%	.200	-
088 Boxelder	13	9	69.2%	7	77.8%	.538	3.35
172 Anaconda	11	6	54.5%	2	33.3%	.182	2.77
243 Collbran	5	5	100.0%	3	60.0%	.600	2.05
323 Weber Basin	21	15	71.4%	9	60.0%	.429	-
064 Timber Lake	29	18	62.1%	12	66.7%	.414	-
078 Curlew	9	6	66.7%	4	66.7%	.444	4.97
144 Angell	25	17	68.0%	13	76.5%	.520	-
145 Wolf Creek	17	14	82.4%	10	71.4%	.588	3.48
251 Marsing	30	24	80.0%	16	66.7%	.533	2.63
340 Fort Simcoe	13	9	69.2%	7	77.8%	.539	3.74
343 Columbia Basin	41	28	68.3%	15	53.6%	.366	3.35
770 Keystone	3	3	100.0%	2	66.7%	.667	2.25
750 Excelsior Springs	9	8	88.9%	4	50.0%	.445	2.73
776 Tongue Point	3	3	100.0%	3	100.0%	1.000	2.71
801 New Jersey	12	5	41.7%	4	80.0%	.333	2.75
831 Woodstock	1	1	100.0%	1	100.0%	1.000	2.50
836 Whitney Young	7	2	28.6%	1	50.0%	.143	2.30
816 Cincinnati	13	9	69.2%	4	44.4%	.307	2.90
817 Cincinnati	1	0	0	0	0	0	0
811 El Paso	17	11	64.7%	8	72.7%	.471	2.42
813 El Paso	1	1	100.0%	1	100.0%	1.000	2.30
840 Kicking Horse	12	6	50.0%	4	66.7%	.333	2.68
442 San Jose	31	25	80.6%	20	80.0%	.645	3.95
443 San Jose	1	1	100.0%	1	100.0%	1.000	3.65
446 San Jose	5	2	40.0%	1	50.0%	.200	3.47
806 Hawaii	5	3	60.0%	2	66.7%	.400	-
411 Portland	4	3	75.0%	3	100.0%	.750	2.70
413 Portland	3	2	66.7%	2	100.0%	.667	2.50
906 Breckenridge	105	64	61.0%	32	50.0%	.305	2.47
905 Atterbury	125	56	44.8%	16	28.6%	.128	2.61
903 Gary	84	50	59.5%	34	68.0%	.405	2.61
910 Clearfield	131	83	63.4%	48	57.8%	.366	2.86
919 Santa Rosa	15	13	86.7%	11	84.6%	.733	5.44
TOTAL	990	634	.640%	384	60.6%	.388	-

05-A, WAITER

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
243 Collbran	1	1	100.0%	1	100.0%	1.000	1.40
145 Wolf Creek	2	1	50.0%	1	100.0%	.500	3.00
251 Marsing	1	1	100.0%	1	100.0%	1.000	1.00
343 Columbia Basin	1	1	100.0%	0	0	0	0
058 Lyndon Johnson	2	2	100.0%	1	50.0%	.500	-
805 Treasure Lake	1	1	100.0%	0	0	0	0
323 Weber Basin	1	1	100.0%	1	100.0%	.000	-
811 El Paso	1	0	0	0	0	0	0
919 Santa Rosa	5	3	60.0%	2	66.7%	.400	6.50
TOTAL	15	11	73.3%	7	63.6%	.467	-

05-B, COOK (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	12	12	100.0%	5	41.7%	.417	2.57
350 Harpers Ferry	5	4	80.0%	3	75.0%	.600	2.95
058 Lyndon Johnson	4	3	75.0%	1	33.3%	.250	-
059 Schenck	11	8	72.7%	6	75.0%	.545	3.05
070 Jacobs Creek	8	7	87.5%	1	14.3%	.125	4.00
258 Great Onyx	12	7	58.3%	3	42.9%	.250	2.36
300 Oconaluftee	14	10	71.4%	5	50.0%	.357	2.41
040 Lydick Lake	1	1	100.0%	0	0	0	0
082 Blackwell	11	4	36.4%	1	25.0%	.091	3.00
109 Golconda	6	2	33.3%	2	100.0%	.333	2.52
009 Cassadaga	11	8	72.7%	2	25.0%	.182	2.30
098 Ouchita	9	9	100.0%	4	44.4%	.444	2.53
305 Treasure Lake	15	14	93.3%	10	71.4%	.667	-
051 Pine Ridge	10	4	40.0%	3	75.0%	.300	3.00
270 Mingo	15	11	73.3%	8	72.7%	.533	-
046 Trapper Creek	13	7	53.8%	2	28.6%	.154	2.95
088 Boxelder	13	9	69.2%	6	66.7%	.462	3.58
172 Anaconda	11	6	54.5%	2	33.3%	.164	2.77
243 Collbran	4	4	100.0%	2	50.0%	.500	2.37
323 Weber Basin	19	13	68.4%	8	61.5%	.421	2.44
064 Timber Lake	28	18	64.3%	6	33.3%	.214	2.71
078 Curlew	9	6	66.7%	3	50.0%	.333	5.86
144 Angell	21	15	71.4%	10	66.7%	.476	3.88
145 Wolf Creek	14	12	85.7%	8	66.7%	.571	3.85
251 Marsing	28	22	78.6%	13	59.1%	.464	2.91
340 Fort Simcoe	13	9	69.2%	7	77.8%	.538	3.74
343 Columbia Basin	37	26	70.3%	13	50.0%	.352	-
801 New Jersey	12	5	41.7%	4	80.0%	.333	2.75
831 Woodstock	1	1	100.0%	1	100.0%	1.000	2.50
816 Cincinnati	13	9	69.2%	2	22.2%	.154	2.65
817 Cincinnati	1	0	0	0	0	0	0
811 El Paso	15	11	73.3%	7	63.6%	.466	2.41
813 El Paso	1	1	100.0%	1	100.0%	1.000	2.30
840 Kicking Horse	11	5	45.5%	2	40.0%	.182	2.75
442 San Jose	2	2	100.0%	2	100.0%	1.000	6.66
806 Hawaii	4	2	50.0%	1	50.0%	.250	3.05
411 Portland	1	0	0	0	0	0	0
413 Portland	1	1	100.0%	1	100.0%	1.000	2.50
906 Breckenridge	57	34	59.6%	16	47.1%	.281	2.44
905 Atterbury	62	26	41.9%	9	34.6%	.145	2.73
903 Gary	47	26	55.3%	16	61.5%	.340	2.48
910 Clearfield	63	40	63.5%	23	57.5%	.365	2.70
919 Santa Rosa	5	5	100.0%	4	80.0%	.800	4.66
TOTAL	650	419	64.5%	223	53.2%	.343	-

05-C, BAKER (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
031 Pine Knot	15	7	46.7%	4	57.1%	.266	2.22
144 Angell	1	0	0	-	-	-	-
251 Marsing	1	1	100.0%	-	-	-	-
776 Tongue Point	1	1	100.0%	1	100.0%	1.000	3.25
411 Portland	3	3	100.0%	3	100.0%	1.000	2.70
413 Portland	2	1	50.0%	1	100.0%	.500	2.50
906 Breckenridge	47	29	61.7%	8	27.6%	.170	2.60
905 Atterbury	63	30	47.6%	3	10.0%	.048	2.26
903 Gary	15	8	53.3%	2	25.0%	.133	3.12
910 Clearfield	35	20	57.1%	8	40.0%	.229	2.91
919 Santa Rosa	1	1	100.0%	-	-	-	-
TOTAL	184	101	54.9%	30	29.7%	.163	2.66

05-D, MEATCUTTER (MALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
903 Gary	22	16	72.7%	8	50.0%	.364	2.95
910 Clearfield	30	21	70.0%	8	38.1%	.267	3.36
TOTAL	52	37	71.2%	16	43.2%	.308	3.11

05-F, BAKER, SECOND (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
836 Whitney Young	6	1	16.7%	-	-	-	-
910 Clearfield	1	0	0	-	-	-	-
144 Angell	1	1	100.0%	1	100.0%	1.000	1.04
TOTAL	8	2	25.0%	1	50.0%	.125	1.04

05-G, COOK, SHORTORDER (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
258 Great Onyx	2	2	100.0%	1	50.0%	.500	3.00
144 Angell	1	1	100.0%	-	-	-	-
840 Kicking Horse	1	1	100.0%	1	100.0%	1.000	3.00
442 San Jose	3	3	100.0%	1	33.3%	.333	3.50
443 San Jose	1	1	100.0%	1	100.0%	1.000	3.65
TOTAL	8	8	100.0%	4	50.0%	.500	3.29

05-H, COUNTER GRILLMAN (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
144 Angell	1	0	-	-	-	-	-
770 Keystone	3	3	100.0%	2	66.7%	.667	2.25
442 San Jose	1	1	100.0%	1	100.0%	1.000	2.56
TOTAL	5	4	80.0%	3	75.0%	.600	2.35

05-I, PANTRY/SALAD (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
046 Trapper Creek	2	2	100.0%	1	50.0%	.500	2.85
750 Excelsior Springs	1	0	0	0	0	0	0
343 Columbia Basin	1	1	100.0%	0	0	0	0
806 Hawaii	1	1	100.0%	1	100.0%	1.000	1.00
910 Clearfield	1	1	100.0%	1	100.0%	1.000	1.00
919 Santa Rosa	2	2	100.0%	1	100.0%	1.000	6.87
TOTAL	8	7	87.5%	4	57.1%	.500	2.93

05-X, OTHER (MALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
300 Oconaluftee	1	0	0	0	0	0	0
064 Timber Lake	1	0	0	0	0	0	0
750 Excelsior Springs	8	8	100.0%	3	37.5%	.375	2.81
776 Tongue Point	2	2	100.0%	1	50.0%	.500	2.53
836 Whitney Young	1	1	100.0%	1	100.0%	1.000	2.30
442 San Jose	25	19	76.0%	13	68.4%	.520	3.84
446 San Jose	5	2	40.0%	0	0	0	0
058 Lyndon Johnson	1	1	100.0%	1	100.0%	1.000	9.99
323 Weber Basin	1	1	100.0%	0	0	0	0
145 Wolf Creek	1	1	100.0%	1	100.0%	1.000	1.04
919 Santa Rosa	2	2	100.0%	2	100.0%	1.000	5.49
TOTAL	48	37	77.1%	22	59.5%	.458	3.87

CLUSTER 05/25, FOOD SERVICE (FEMALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	7	4	57.1%	3	75.0%	.429	2.77
703 Charleston	20	9	45.0%	6	66.7%	.300	2.32
716 Keystone	3	0	0	-	-	-	-
701 Cleveland	2	0	0	-	-	-	-
710 McKinney	64	33	51.6%	21	63.6%	.328	2.29
706 Excelsior Springs	43	18	41.9%	10	55.6%	.233	2.30
717 Tongue Point	22	13	59.1%	12	92.3%	.545	3.57
851 Atlanta	7	4	57.1%	2	50.0%	.286	2.45
853 Atlanta	1	0	0	-	-	-	-
849 El Paso	5	2	40.0%	2	100.0%	.400	2.35
807 Hawaii	5	2	40.0%	2	100.0%	.400	3.07
415 Portland	3	3	100.0%	3	100.0%	1.000	2.33
934 Breckenridge	24	10	41.7%	7	70.0%	.292	2.37
926 Atterbury	16	10	62.5%	4	40.0%	.250	2.74
914 Gary	1	0	0	-	-	-	-
921 Santa Rosa	1	1	100.0%	1	100.0%	1.000	1.00
709 Albuquerque	9	6	66.7%	5	83.3%	.556	-
702 LA	7	6	85.7%	5	83.3%	.714	-
TOTAL	251	128	51.0%	87	68.0%	.347	

05-A, WAITRESS

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	1	1	100.0%	0	0	0	0
709 Albuquerque	8	6	75.0%	6	100.0%	.750	-
710 McKinney	10	6	60.0%	2	33.3%	.200	1.70
702 Los Angeles	2	2	100.0%	2	100.0%	1.000	-
717 Tongue Point	1	1	100.0%	1	100.0%	1.000	-
921 Santa Rosa	1	1	100.0%	1	100.0%	1.000	-
TOTAL	23	17	73.9%	12	70.6%	.521	-

05-B/25-B, COOK (FEMALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	6	3	50.0%	3	100.0%	.500	2.77
710 McKinney	6	4	66.7%	3	75.0%	.500	2.43
702 LA	1	1	100.0%	1	100.0%	.500	2.50
851 Atlanta	[illegible]	4	57.1%	-	-	-	-
853 ATlanta	1	0	0	-	-	-	-
845 Cincinnati	11	7	63.6%	2	28.6%	.182	2.40
849 El Paso	5	2	40.0%	2	100.0%	.400	2.35
807 Hawaii	5	2	40.0%	2	100.0%	.400	3.07
934 Breckenridge	12	7	58.3%	3	42.9%	.250	2.28
926 Atterbury	6	4	66.7%	1	25.0%	.167	2.60
709 Albuquerque	1	1	100.0%	-	-	-	-
TOTAL	61	35	57.4%	17	48.6%	.279	2.54

05-C, BAKER (FEMALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
717 Tongue Point	2	2	50.0%	1	50.0%	.500	2.50
415 Portland	3	3	100.0%	3	100.0%	1.000	2.33
934 Breckenridge	12	3	33.3%	1	33.3%	.083	2.60
926 Atterbury	10	6	16.7%	1	16.7%	.100	2.99
914 Gary	1	0	0	-	-	-	-
TOTAL	28	14	50.0%	6	42.9%	.214	2.51

05-E, BAKER HELPER (FEMALE)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
717 Tongue Point	2	2	100.0%	2	100.0%	1.000	3.20

05-F, BAKER, SECOND (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	0	0	-	-	-	-

05-G, COOK, SHORT ORDER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	8	4	50.0%	2	50.0%	.250	2.17
710 McKinney	11	6	54.5%	3	50.0%	.273	2.23
TOTAL	19	10	52.6%	5	50.0%	.263	2.21

05-H, COUNTER GIRL/MAN (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	3	0	0	-	-	-	-
706 Excelsior Springs	2	1	50.0%	1	100.0%	.500	2.80
702 LA	4	3	75.0%	2	66.7%	.500	2.99
TOTAL	9	4	44.4%	3	75.0%	.333	2.93

05-I, PANTRY/SALAD (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
706 Excelsior Springs	1	0	0	-	-	-	-

05-X, OTHER (FEMALE)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JRM Rate	JTM Wage
703 Charleston	11	5	45.5%	3	60.0%	.273	2.39
701 Cleveland	2	0	0	-	-	-	-
709 Albuquerque	1	0	0	-	-	-	-
710 McKinney	37	17	45.9%	12	70.6%	.324	2.36
706 Excelsior Springs	40	17	42.5%	6	35.3%	.150	2.41
717 Tongue Point	17	8	47.1%	6	75.0%	.353	2.80
TOTAL	108	47	43.5%	27	57.4%	.250	2.47

Males

AUTO & MACHINE REPAIR

CLUSTER 6	# CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
031 Pine Knot	25	18	72.0%	6	33.3%	.240	$2.63
058 Lyndon Johnson	2	2	100.0	0	0.0	0	0
059 Schenck	3	1	33.3	0	0.0	0	0
070 Jacobs Creek	25	17	68.0	7	41.2	.280	3.69
258 Great Onyx	9	6	66.7	2	33.3	.222	2.40
300 Oconaluftee	3	2	66.7	0	0.0	0	0
009 Cass	10	9	90.0	7	77.8	.700	2.63
098 Ouachita	8	7	87.5	1	14.3	.125	2.30
305 Treasure Lake	6	6	100.0	6	100.0	1.000	3.01
051 Pine Ridge	9	6	66.7	4	66.7	.444	3.00
270 Mingo	2	1	50.0	1	100.0	.500	3.00
046 Trapper Creek	4	2	50.0	0	0.0	0	0
088 Boxelder	17	9	52.9	7	77.8	.412	2.97
172 Anaconda	14	10	71.4	4	40.0	.286	3.57
243 Collbran	1	0	0.0	0	0.0	0	0
067 Timber Lake	19	11	57.9	3	27.3	.158	3.06
078 Curlew	20	16	80.0	12	75.0	.600	2.99
144 Angell	14	8	57.1	3	37.5	.214	3.05
145 Wolf Creek	19	12	62.3	10	83.3	.526	3.41
251 Marsing	9	6	55.7	3	50.0	.333	3.16
340 Fort Simcoe	13	7	53.8	4	57.1	.308	4.20
605 Arecibo	37	35	94.6	30	85.7	.811	1.98
608 Rio Grande	27	18	66.7	9	50.0	.333	1.71
801 New Jersey	31	17	54.8	11	64.7	.355	2.91
826 Pittsburg	19	17	89.5	8	47.1	.421	2.97
831 Woodstock	10	5	50.0	2	40.0	.200	3.10
836 Whitney Young	6	2	33.3	0	0.0	0	0
431 Detroit	16	8	50.0	3	37.5	.188	2.60
816 Cincinnati	20	12	60.0	7	58.3	.350	2.50
811 El Paso	26	15	57.7	9	60.0	.346	2.34
813 El Paso	10	6	60.0	2	33.3	.200	2.30
857 Tulsa	1	1	100.0	0	0.0	0	0
859 Tulsa	2	1	50.0	0	0.0	0	0
840 Kicking Horse	15	5	33.3	0	0.0	0	0
401 Phoenix	26	16	61.5	5	31.3	.192	2.47
403 Phoenix	17	8	47.1	0	0.0	0	0
442 San Jose	20	16	80.0	12	75.0	.600	3.20
443 San Jose	2	2	100.0	2	100.0	1.000	3.75
446 San Jose	2	2	100.0	2	100.0	1.000	3.37
806 Hawaii	23	17	73.9	7	41.2	.304	3.21
411 Portland	12	6	50.0	3	50.0	.250	4.33
413 Portland	6	6	100.0	4	66.7	.667	3.25
906 Breckinridge	215	147	68.4	55	37.4	.256	2.64
905 Atterbury	163	91	55.8	23	25.3	.141	2.95
903 Gary	127	88	69.3	63	71.6	.303	3.07
910 Clearfield	195	119	61.0	59	49.6	.303	3.07
902 Tongue Point	1	0	0.0	0	0.0	0	0
161 Flatwoods	1	1	100.0	1	100.0	1.000	3.00
770 Keystone	1	1	100.0	1	100.0	1.000	2.70
TOTAL	1263	818	64.7%	397	48.5%	.314	$2.89

6A

AUTO MECHANIC HELPER

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
058 Lyndon Johnson	1	1	100.0%	0	0.0%	0	$ 0
070 Jacobs Creek	4	2	50.0	0	0.0	0	0
172 Anaconda	1	0	0.0	0	0.0	0	0
144 Angell	4	2	50.0	0	0.0	0	0
257 Marsing	6	3	50.0	1	33.3	.167	4.00
605 Arecibo	20	19	95.0	14	73.7	.700	1.95
826 Pittsburgh	7	7	100.0	3	42.9	.429	3.35
831 Woodstock	1	1	100.0	0	0.0	0	0
431 Detroit	2	2	100.0	0	0.0	0	0
811 El Paso	16	11	68.8	8	72.7	.500	2.32
813 El Paso	5	3	60.0	2	66.7	.400	2.30
840 Kicking Horse	9	2	22.2	0	0.0	0	0
401 Phoenix	2	0	0.0	0	0.0	0	0
403 Phoenix	1	1	100.0	0	0.0	0	0
442 San Jose	2	2	100.0	2	100.0	1.000	3.12
806 Hawaii	20	15	75.0	6	40.0	.300	3.25
906 Breckinridge	1	1	100.0	0	0.0	0	0
903 Gary	2	1	100.0	0	0.0	0	0
905 Atterbury	22	18	81.8	2	11.1	.091	3.25
910 Clearfield	131	78	59,5	29	32.2	.221	3.07
770 Keystone	1	1	100.0	1	100.0	1.000	2.70
TOTAL	258	170	68.0%	68	40.0%	.264	$2.89

AUTO SERVICE REPAIR

6B

	# CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
031 Pine Knot	25	18	72.0%	5	27.8%	.200	$2.70
058 Lyndon Johnson	1	1	100.0	0	0	0	0
059 Schenck	3	1	33.3	0	0	0	. 0
070 Jacobs Creek	12	7	58.3	4	57.1	.333	2.91
258 Great Onyx	9	6	66.7	2	33.3	.222	2.40
300 Oconaluftee	2	2	100.0	0	0	0	0
009 Cass	9	9	100.0	7	77.8	.778	2.63
098 Ouachita	8	7	87.5	1	14.3	.125	2.30
305 Treasure Lake	6	6	100.0	4	66.7	.667	3.12
051 Pine Ridge	9	9	100.0	6	66.7	.667	3.00
270 Mingo	2	1	50.0	1	100.0	.500	3.00
046 Trapper Creek	4	2	50.0	0	0	0	0
088 Boxelder	17	9	52.9	7	77.8	.412	2.97
172 Anaconda	4	4	100.0	1	25.0	.250	4.90
064 Timber Lake	19	11	57.9	2	18.2	.105	3.00
078 Curlew	20	16	80.0	8	50.0	.400	2.91
144 Angell	6	3	50.0	1	33.3	.167	3.80
145 Wolfcreek	4	2	50.0	2	100.0	.500	3.00
251 Marsing	3	3	100.0	1	33.3	.333	3.00
340 Fort Simcoe	5	4	80.0	2	50.0	.400	4.75
801 New Jersey	13	7	53.8	6	85.7	.461	2.93
826 Pittsburgh	2	2	100.0	2	100.0	1.000	3.25
831 Woodstock	7	3	42.9	1	33.3	.143	2.60
836 Whitney Young	6	2	33.3	0	0	0	0
431 Detroit	14	6	42.9	3	50.0	.214	2.60
816 Cincinnati	20	12	60.0	7	58.3	.350	2.50
840 Kicking Horse	4	1	25.0	0	0	0	0
401 Phoenix	4	3	75.0	1	33.3	.250	2.50
403 Phoenix	5	3	60.0	0	0	0	0
442 San Jose	7	5	71.4	4	80.0	.571	3.12
906 Breckenridge	66	39	59.1	14	35.9	.212	2.57
905 Atterbury	50	27	54.0	6	22.2	.120	2.71
903 Gary	53	40	75.5	29	72.5	.547	3.06
910 Clearfield	1	0	0	0	0	0	0
161 Flatwoods	1	1	100.0	1	100.0	1.000	3.00
TOTAL	421	272	64.6%	128	47.1	.303	2.91

6C

Farm Truck/Equipment

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
172 Anaconda	9	6	66.7%	1	16.7%	.111	$3.50
243 Collbran	1	0	0.0	0	0.0	0	0
801 New Jersey	5	4	80.0	1	25.0	.200	2.50
840 Kicking Horse	2	2	100.0	0	0.0	0	0
442 San Jose	1	0	0.0	0	0.0	0	0
TOTAL	18	12	66.7%	2	16.7%	.111	$3.00

Small Gas Engine Repair

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
826	Pittsburgh	8	7	87.5%	2	28.6%	.250	$2.45
442	San Jose	1	0	0.0	0	0.0	0	0
411	Portland	1	0	0.0	0	0.0	0	0
905	Atterbury	1	0	0.0	0	0.0	0	0
903	Gary	11	7	63.6	3	42.9	.273	3.16
TOTAL		22	14	63.6%	5	35.7%	.227	2.88

6E

Auto Body Repairman

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
145	Wolf Creek	1	1	100.0	1	100.0%	1.000	$3.00
605	Arecibo	17	16	94.1	14	87.5	.824	1.91
608	Rio Grande	14	10	71.4	3	30.0	.214	1.75
801	New Jersey	11	6	54.5	3	50.0	.273	3.16
831	Woodstock	2	1	50.0	0	0.0	0	0
857	Tulsa	1	1	100.0	0	0.0	0	0
859	Tulsa	1	1	100.0	0	0.0	0	0
401	Phoenix	1	0	0.0	0	0.0	0	0
442	San Jose	1	1	100.0	0	0.0	0	0
806	Hawaii	3	2	66.7	1	50.0	.333	3.00
411	Portland	11	6	54.5	3	50.0	.273	4.33
413	Portland	6	6	100.0	4	66.7	.667	3.25
906	Breckinridge	72	52	72.2	21	40.4	.292	2.79
905	Atterbury	54	23	42.6	9	39.1	.167	2.81
903	Gary	32	28	87.5	18	64.3	.563	2.85
910	Clearfield	62	40	64.5	22	55.0	.355	3.25
902	Tongue Point	1	0	0.0	0	0.0	0	0
TOTAL		290	195	67.2%	99	50.8%	.341	$2.83

6F

Auto Parts Clerk

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
145 Wolf Creek	13	8	61.5%	5	62.5%	.385	$3.58
906 Breckinridge	5	4	80.0	2	50.0	.400	2.65
905 Atterbury	3	1	33.3	0	0.0	0	0
903 Gary	16	5	31.3	3	60.0	.188	2.75
TOTAL	37	18	48.6%	10	55.6%	.220	$3.15

6H

Service Station Attendant

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
300 Oconaluftee	1	0	0.0%	0	0.0%	0	$ 0
009 Cass	1	0	0.0	0	0.0	0	0
144 Angell	4	3	75.0	2	66.7	.500	2.67
401 Phoenix	18	13	72.2	1	7.7	.056	2.30
403 Phoenix	11	4	36.4	0	0.0	0	0
442 San Jose	2	2	100.0	1	50.0	.500	3.40
826 Pittsburgh	2	1	50.0	1	100.0	.500	2.30
TOTAL	39	23	59.0%	5	21.7%	.128	$2.67

General Machinery

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
859 Tulsa	1	0	0.0	0	0.0	0	0

Brake Repairman

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
070 Jacobs Creek	1	1	100.0%	0	0.0	0	$ 0
442 San Jose	2	2	100.0	0	0.0	0	0
443 San Jose	1	1	100.0	1	100.0	100.00	4.00
903 Gary	1	0	0.0	0	0.0	0	0
TOTAL	5	4	80.0%	1	25.0%	.200	$4.00

6N

Diesel Mechanic

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
070 Jacobs Creek	8	7	87.5%	3	42.9%	.375	$4.73
340 Fort Simcoe	8	3	37.5	1	33.3	.125	5.00
811 El Paso	9	3	33.3	0	0.0	0	0
813 El Paso	5	3	60.0	0	0.0	0	0
401 Phoenix	1	0	0.0	0	0.0	0	0
905 Atterbury	32	21	65.6	0	0.0	0	0
903 Gary	1	1	100.0	0	0.0	0	0
TOTAL	65	38	59.4%	4	10.5%	.063	$4.79

6 0

Farm Equipment Mechanic

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
910	Clearfield	1	1	100.0%	1	100.0%	1.0	$2.55

Front End Man

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
442	San Jose	1	1	100.0%	0	0.0%	0	0

Heavy Equipment Repair

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
903 Gary	11	6	54.5%	3	50.0%	.273	$3.44

6X

Other

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
145	Wolf Creek	1	1	100.0%	1	100.0%	100.000	$3.75
801	New Jersey	2	0	0.0	0	0	0	0
442	San Jose	3	3	100.0	1	33.3	.333	3.25
443	San Jose	1	1	100.0	1	100.0	100.000	3.50
446	San Jose	2	2	100.0	1	100.0	100.000	3.37
906	Breckinridge	71	51	71.8	12	23.5	.169	2.70
905	Atterbury	1	1	100.0	0	0.0	0	0
TOTAL		81	59	72.8%	16	27.1%	.198	$2.89

Females

6.

Auto and Machine Repair

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
146	Angell	1	1	100.0%	0	0.0%	0	$ 0
716	Keystone	2	1	50.0	0	0.0	0	0
437	Detroit	1	1	100.0	0	0.0	0	0
845	Cincinnati	1	0	0.0	0	0.0	0	0
405	Phoenix	5	1	20.0	0	0.0	0	0
407	Phoenix	1	1	100.0	0	0.0	0	0
415	Portland	2	2	100.0	1	50.0	.500	3.00
934	Breckinridge	1	1	100.0	1	100.0	1.000	3.00
926	Atterbury	11	3	27.3	2	66.7	.182	4.68
914	Gary	2	1	50.0	1	100.0	.500	3.00

Auto Mechanic Helper (Female)

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
716	Keystone	1	1	100.0%	-	-	-	-

Auto Service Repair (Female)

		CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
716	Keystone	1	0	0.0%	-	- %	-	$ -
437	Detroit	1	1	100.0	-	-	-	-
845	Cincinnati	1	0	0.0	-	-	-	-
405	Phoenix	1	0	0.0	-	-	-	-
407	Phoenix	1	1	100.0	-	-	-	-
415	Portland	1	1	100.0	-	-	-	-
926	Atterbury	1	1	100.0	1	100.0	1.00	3.00
TOTAL		7	4	57.1%	1	25.0%	.143	$3.00

06E

Auto Body Repairman

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
405 Phoenix	1	0	0.0%	-	- %	-	$ -
415 Portland	1	1	100.0	1	100.0	1.000	3.00
916 Atterbury	10	2	20.0	1	50.0	.100	6.37
TOTAL	12	3	25.0%	2	66.7%	.167	$4.69

Auto Parts Clerk (Female)

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
934 Breckinridge	1	1	100.0%	1	100.0%	1.000	$3.00
914 Gary	2	1	50.0	1	100.0	.500	3.00
TOTAL	3	2	66.7%	2	100.0%	.667	$3.00

Service Station Attendant (Female)

	CAT I	# PLACED	% PLACED	# JTM	% JTM	P/JTM RATE	JTM WAGE
146 Angell	1	1	100.0%	-	-	-	-
405 Phoenix	3	1	33.3	-	-	-	-
TOTAL	4	2	50.0%	-	-	-	-

07/27 Construction Trades (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	77	69	89.6%	50	72.5%	.649	$3.96
350 Harper's Ferry	48	31	64.6	16	48.5	.333	4.46
031 Pine Knot	136	75	55.1	35	46.7	.257	3.48
058 LBJ	47	34	72.3	23	67.6	.489	3.59
059 Schenck	25	20	80.0	15	75.0	.600	3.55
070 Jacobs Creek	71	47	66.2	38	80.9	.535	4.25
258 Great Onyx	112	73	65.2	47	64.4	.420	3.95
300 Oconaluftee	72	46	63.9	25	54.3	.347	3.43
082 Blackwell	47	34	72.3	32	94.1	.681	5.28
109 Golconda	39	27	69.2	22	81.5	.564	4.35
009 Cass	70	56	80.0	41	73.2	.586	3.57
098 Ouachita	60	54	90.0	43	79.6	.717	4.33
305 Treasure Lake	67	57	85.1	52	91.2	.776	4.44
051 Pine Ridge	66	43	65.2	30	69.8	.455	3.92
270 Mingo	61	42	68.9	26	61.9	.426	4.00
046 Trapper Creek	22	12	54.5	10	83.3	.455	5.65
088 Boxelder	76	62	81.6	47	75.8	.618	4.23
172 Anaconda	49	33	67.4	21	63.6	.429	4.28
243 Collbran	53	41	77.4	29	70.7	.547	4.45
323 Weber Basin	61	48	78.7	41	85.4	.672	4.66
064 Timber Lane	57	46	80.7	37	80.4	.649	5.36
078 Curlew	62	46	74.2	34	73.9	.548	4.88
144 Angell	103	70	68.0	37	52.9	.359	4.61
145 Wolf Creek	86	69	80.2	43	62.3	.500	4.90
251 Marsing	113	79	69.9	39	49.4	.345	4.41
340 Ft. Simcoe	95	51	60.0	37	64.9	.390	5.00
343 Columbia Basin	78	63	80.8	47	74.6	.603	4.54
605 Arecibo	17	16	94.1	12	75.0	.706	2.44
608 Rio Grande	23	18	78.3	13	72.2	.565	2.00
770 Keystone	20	20	100.0	14	70.0	.700	4.70
732 Cleveland	4	3	75.0	2	66.7	.500	4.49
750 Excelsior Springs	17	17	100.0	11	64.7	.647	3.27
740 LA	1	1	100.0	1	100.0	1.00	9.99
741 LA	3	3	100.0	2	66.7	.667	5.17
776 Tongue Point	14	13	92.9	10	76.9	.714	4.62
801 NJ	25	14	56.0	7	50.0	.280	3.04
831 Woodstock	34	25	73.5	22	88.0	.647	4.08
836 Whitney Young	42	17	40.5	9	52.9	.214	2.94
431 Detroit	37	27	73.0	22	81.5	.595	3.21
816 Cincinnati	10	6	60.0	2	33.3	.200	4.13
817 Cincinnati	7	7	100.0	6	85.7	.857	3.85
818 Cincinnati	2	2	100.0	1	50.0	.500	5.27
819 Mississippi	1	1	100.0	1	100.0	1.00	3.50
857 Tulsa	4	2	50.0	1	50.0	.250	3.50
840 Kicking Horse	46	28	60.9	17	60.7	.369	4.83

07/27 Construction Trades (Male) Continued

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
401 Phoenix	24	18	75.0%	13	72.2%	.542	$4.72
403 Phoenix	31	25	80.7	21	84.0	.677	4.26
442 San Jose	23	20	87.0	18	90.0	.783	3.38
443 San Jose	2	2	100.0	1	50.0	.500	3.50
446 San Jose	2	2	100.0	1	50.0	.500	3.00
806 Hawaii	22	15	68.2	10	66.7	.455	3.33
906 Breckenridge	333	198	59.5	102	51.5	.306	3.14
905 Atterbury	143	80	55.9	28	35.0	.196	3.14
903 Gary	278	210	75.5	137	65.2	.493	3.60
TOTAL	3,018	2,124	70.4%	1,401	66.0%	.464	$4.02

07A/27A Carpenter Construction (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	19	19	100.0%	9	47.4%	.474	$2.73
350 Harper's Ferry	16	13	81.3	6	46.2	.375	3.78
031 Pine Knot	55	33	60.0	12	36.4	.218	3.30
058 LBJ	10	7	70.0	5	71.4	.500	3.19
059 Schenck	7	6	85.7	3	50.0	.429	3.43
070 Jacobs Creek	16	5	31.3	2	40.0	.125	3.70
258 Great Onyx	43	32	74.4	18	56.3	.419	4.46
300 Oconaluftee	18	11	61.1	4	36.4	.222	3.94
082 Blackwell	23	20	87.0	17	85.0	.739	5.15
109 Golconda	18	14	77.8	11	78.6	.611	4.91
009 Cass	30	25	83.3	18	72.0	.600	4.06
098 Onachita	24	24	100.0	22	91.7	.917	4.69
305 Treasure Lake	25	21	84.0	19	90.5	.760	4.24
051 Pine Ridge	40	25	62.5	15	60.0	.375	3.72
220 Mingo	20	15	75.0	7	46.7	.350	3.31
046 Trapper Creek	13	9	69.2	8	88.9	.615	5.65
088 Boxelder	40	34	85.0	27	79.4	.675	4.86
172 Anaconda	25	18	72.0	9	50.0	.360	4.05
243 Collbran	18	15	83.3	10	66.7	.556	4.25
323 Weber Basin	20	18	90.0	16	88.9	.800	4.76
064 Timber Lake	33	26	78.8	19	73.1	.576	5.20
078 Curlew	35	25	71.4	18	72.0	.514	4.73
144 Angell	53	40	75.5	25	62.5	.471	5.10
145 Wolf Creek	41	33	80.5	21	63.6	.512	4.95
251 Marsing	33	23	69.7	13	56.5	.394	4.86
340 Ft. Simcoe	31	23	74.2	14	60.9	.452	5.22
343 Columbia Basin	20	18	90.0	14	77.8	.700	5.41
605 Arecibo	13	12	92.3	8	66.7	.616	2.36
608 Rio Grande	6	4	66.7	1	25.0	.167	2.00
831 Woodstock	8	8	100.0	8	100.0	1.00	3.94
836 Whitney Young	7	3	42.9	0	-	-	-
840 Kicking Horse	16	11	68.8	6	54.5	.375	4.11
816 Cincinnati	2	1	50.0	1	100.0	.500	5.25
818 Cincinnati	1	1	100.0	1	100.0	1.00	5.27
401 Phoenix	8	7	87.5	5	71.4	.625	4.51
403 Phoenix	11	9	81.8	6	66.7	.546	4.78
806 Hawaii	11	9	81.8	6	66.7	.546	3.58
906 Breckenridge	64	42	67.7	26	61.9	.419	3.21
905 Atterbury	20	13	65.0	2	15.4	.100	2.50
903 Gary	47	32	68.1	11	34.4	.234	3.17
TOTAL	940	704	74.9%	443	62.9%	.471	$4.33

07B/27B Electrician (Males)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	1	1	100.0%	1	100.0%	1.00	$3.95
058 LBJ	1	1	100.0	-	-	-	-
059 Schenck	1	1	100.0	-	-	-	-
070 Jacobs Creek	1	1	100.0%	-	-	-	-
109 Golconda	1	0	-	-	-	-	-
340 Ft. Simcoe	1	0	-	-	-	-	-
078 Curlew	1	1	100.0	1	100.0	1.00	3.50
251 Marsing	1	1	100.0	-	-	-	-
608 Rio Grande	3	3	100.0	3	100.0	1.00	2.00
801 NJ	3	1	33.3	1	100.0	.333	3.50
831 Woodstock	10	8	80.0	5	62.5	.500	4.40
836 Whitney Young	6	1	16.7	-	-	-	-
401 Phoenix	1	1	100.0	1	100.0	1.00	2.50
403 Phoenix	1	1	100.0	-	-	-	-
906 Breckenridge	45	21	46.7	6	28.6	.133	3.25
905 Atterbury	34	16	47.1	3	18.8	.088	2.50
903 Gary	102	76	74.5	51	67.1	.500	3.66
TOTAL	213	134	62.9%	72	53.7%	.338	$3.54

07C/27C Cement Mason (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	6	5	83.3%	3	60.0%	.500	$5.25
350 Harpers Ferry	3	3	100.0	3	100.0	1.00	5.92
031 Pine Knot	33	22	66.7	6	27.3	.182	4.32
058 LBJ	6	4	66.7	1	25.0	.160	2.50
070 Jacobs Creek	3	3	100.0%	2	66.7	.167	4.02
258 Great Onyx	7	5	71.4	3	60.0	.429	3.91
009 Cass	14	12	85.7	5	41.7	.357	2.67
300 Oconaluftee	3	3	100.0	3	100.0	1.00	5.04
305 Treasure Lake	9	8	88.9	6	75.0	.667	4.52
051 Pine Ridge	15	9	60.0	7	77.8	.467	4.92
088 Boxelder	5	2	40.0	2	100.0	.400	3.00
243 Collbran	3	3	100.0	1	33.3	.333	4.00
323 Weber Basin	7	6	85.7	1	16.7	.143	2.75
078 Curlew	1	1	100.0	-	-	-	-
145 Wolf Creek	1	1	100.0	-	-	-	-
251 Marsing	12	9	75.0	6	66.7	.500	4.49
340 Ft. Simcoe	5	1	20.0	1	100.0	.200	2.50
343 Columbia Basin	9	6	66.7	2	33.3	.222	3.12
608 Rio Grande	5	3	60.0	1	33.3	.200	2.00
770 Keystone	4	4	100.0	3	75.0	.750	4.41
831 Woodstock	5	2	40.0	2	100.0	.400	3.69
836 Whitney Young	1	1	100.0	-	-	-	-
840 Kicking Horse	1	1	100.0	-	-	-	-
401 Phoenix	2	2	100.0	2	100.0	1.00	4.75
403 Phoenix	3	3	100.0	1	33.3	.333	5.65
442 San Jose	1	0	-	-	-	-	-
806 Hawaii	1	1	100.0	-	-	-	-
906 Breckenridge	12	4	33.3	-	-	-	-
TOTAL	177	124	70.1%	61	49.2	.345	4.17

07D/27D Brick/Stone Mason

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	10	8	80.0	6	75.0%	.600	$4.05
350 Harpers Ferry	11	2	18.2	-	-	-	-
031 Pine Knott	8	3	37.5	-	-	-	-
058 LBJ	7	4	57.1	2	50.0	.286	2.75
059 Schenck	8	4	50.0	3	75.0	.375	3.00
070 Jacobs Creek	7	4	57.1	2	50.0	.286	3.47
258 Great Onyx	30	18	60.0	7	38.9	.233	3.84
082 Blackwell*	7	5	71.4	5	100.0	.714	6.07
109 Golconda	5	3	60.0	1	33.3	.200	3.00
098 Ouchita	9	7	77.8	3	42.9	.333	4.33
305 Treasure Lake*	11	9	81.8	9	100.0	.818	4.48
270 Mingo	4	3	75.0	1	33.3	.250	6.09
243 Collbran	3	2	66.7	1	50.0	.333	4.00
323 Weber Basin*	17	15	88.2	14	93.3	.824	4.50
251 Marsing	29	18	62.1	4	22.2	.138	5.40
340 Ft. Simeco	8	5	62.5	4	80.0	.500	5.55
343 Columbia Basin	8	5	62.5	5	100.0	.625	4.36
770 Keystone*	4	4	100.0	4	100.0	1.00	4.87
831 Woodstock*	2	2	100.0	2	100.0	1.00	4.00
836 Whitney Young	16	9	56.3	3	33.3	.188	2.81
401 Phoenix	4	2	50.0	-	-	-	-
403 Phoenix	4	3	75.0	2	66.7	.500	3.00
906 Breckenridge	68	44	64.7	21	47.7	.309	3.31
905 Atterbury	1	1	100.0	-	-	-	-
903 Gary	42	34	81.0	25	73.5	.595	3.69
TOTAL	323	214	66.3	124	57.9%	.384	$4.02

07E/27E Painter Paperhanger (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	9	7	77.8%	5	71.4	.556	$5.29
350 Harpers Ferry	4	2	50.0	1	50.0	.250	4.67
031 Pine Knot	11	6	54.6	4	66.7	.364	4.10
058 LBJ	13	9	69.2	7	77.8	.539	4.34
059 Schenck*	9	9	100.0	7	77.8	.778	3.94
258 Great Onyx	7	4	57.1	4	100.0	.571	3.91
070 Jacobs Creek*	10	10	100.0	10	100.0	1.00	4.54
300 Oconaluftee	10	5	50.0	3	60.0	.300	4.17
082 Blackwell	3	2	66.7	2	100.0	.667	7.04
109 Golconda	5	4	80.0	4	100.0	.800	2.95
009 Cass	7	6	85.7	5	83.3	.714	4.00
098 Ouchita	11	9	81.8	6	66.7	.546	3.84
305 Treasure Lake	10	8	80.0	5	62.5	.500	4.65
057 Pine Ridge	7	5	71.4	2	40.0	.286	3.03
270 Mingo	4	1	25.0	1	100.0	.250	2.30
172 Anaconda	10	6	60.0	3	50.0	.300	3.89
046 Trapper Creek	6	2	33.3	-	-	-	-
088 Boxelder	10	9	90.0	6	66.7	.600	3.41
243 Collbran	5	3	60.0	2	66.7	.400	4.00
323 Weber Basin	3	2	66.7	1	50.0	.333	4.75
064 Timber Lake	12	9	75.0	6	66.7	.500	4.80
078 Curlew	5	5	100.0	3	60.0	.600	5.11
144 Augell	7	5	71.4	1	20.0	.143	4.00
145 Wolf Creek	13	9	69.2	5	55.6	.385	5.61
251 Marsing	8	5	62.5	1	20.0	.125	2.30
340 Ft. Simcoe	16	10	62.5	7	70.0	.438	4.56
343 Columbia Basin	17	14	82.4	7	50.0	.412	3.65
608 Rio Grande	1	0	-	-	-	-	-
740 LA	1	1	100.0	1	100.0	1.00	9.99
776 Tongue Point	2	2	100.0	-	-	-	-
801 NJ	17	10	58.8	4	40.0	.225	3.05
770 Keystone	6	6	100.0	3	50.0	.500	4.08
401 Phoenix	14	11	78.6	9	81.8	.643	4.89
806 Hawaii	2	1	50.0	-	-	-	-
906 Breckenridge	51	31	60.8	10	32.3	.196	3.08
903 Gary	37	27	73.0	10	37.0	.270	3.89
TOTAL	363	255	70.3%	145	56.9%	.399	$4.36

07F/27F Heavy Equipment Operator (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	1	1	100.0%	1	100.0%	1.00	$2.75
031 Pine Knot	1	0	-	-	-	-	-
070 Jacobs Creek	24	17	70.8	15	88.2	.625	4.81
082 Blackwell	14	7	50.0	7	100.0	.500	4.95
109 Galconda	10	6	60.0	5	83.3	.500	4.75
009 Cass	11	8	72.7	1	12.5	.091	2.30
098 Ouchita	1	1	100.0	-	-	-	-
051 Pine Ridge	1	0	-	-	-	-	-
770 Mingo	7	4	57.1	1	25.0	.143	4.00
046 Trapper Creek	3	1	33.3	1	100.0	.333	5.50
172 Anaconda	14	9	64.3	3	33.3	.214	4.97
243 Collbran	12	10	83.3	4	40.0	.333	6.48
323 Weber Basin	13	6	46.2	6	100.0	.462	5.66
078 Curlew	3	2	66.7	1	50.0	.333	8.05
144 Angell	1	0	-	-	-	-	-
340 Ft. Simcoe	15	8	53.3	5	62.5	.333	5.69
605 Arecibo	3	3	100.0	1	33.3	.333	3.50
840 Kicking Horse	29	16	55.2	6	37.5	.207	6.55
906 Breckenridge	60	38	63.3	6	15.8	.100	4.00
903 Gary	38	32	84.2	13	40.6	.342	4.00
TOTAL	261	169	64.8%	76	45.0%	.291	$4.93

07G Furnace Repairman (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
816 Cincinnati	2	0	-	-	-	-	-

07H Plumber (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
608 Rio Grande	8	6	75.0%	1	16.7%	.125	$2.25
831 Woodstock	3	3	100.0	3	100.0	1.00	3.75
836 Whitney Young	2	1	50.0	1	100.0	.500	3.00
906 Breckenridge	32	18	56.3	5	27.8	.156	2.99
905 Atterbury	16	7	14.3	1	14.3	.063	2.88
TOTAL	61	35	57.4%	11	31.4%	.180	$3.12

071/271 Plasterer (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	9	8	88.9%	4	50.0%	.444	$4.37
350 Harper's Ferry	2	2	100.0	1	50.0	.500	4.50
258 Great Onyx	10	5	50.0	2	40.0	.200	3.93
300 Oconaluftee	3	2	66.7%	-	-	-	-
098 Ouchita	8	7	87.5	5	71.4	.625	4.78
305 Treasure Lake	10	10	100.0	9	90.0	.900	4.89
051 Pine Ridge	5	4	80.0	3	75.0	.600	6.05
064 Timber Lake	12	11	91.7	11	100.0	.917	6.05
145 Wolf Creek	9	7	77.8	5	71.4	.556	5.75
340 Ft. Simcoe	7	3	42.9	1	33.3	.143	5.00
343 Columbia Basin	10	8	80.0	6	75.0	.600	5.31
770 Keystone	6	6	100.0	3	50.0	.500	5.60
831 Woodstock	1	1	100.0	1	100.0	1.00	6.00
737 Cleveland	1	1	100.0	1	100.0	1.00	4.00
401 Phoenix	3	2	66.7	1	50.0	.333	7.08
403 Phoenix	4	2	50.0	2	100.0	.500	5.08
903 Gary	12	9	75.0	3	33.3	.250	3.55
TOTAL	112	88	78.6%	58	65.9%	.518	$4.99

07J Tilesetter (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
816 Cincinnati	1	1	100%	1	100%	1.00	$3.00

07K/27K Construction Labor (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	2	2	100.0%	1	50.0%	.500	$5.50
350 Harper's Ferry	2	2	100.0	1	50.0	.500	6.50
078 Curlew	17	12	70.6	7	58.3	.412	5.03
031 Pine Knot	28	11	39.3	5	45.5	.179	3.85
758 Great Onyx	7	4	57.1	1	25.0	.143	2.30
144 Angell	7	4	57.7	1	50.0	.286	3.33
145 Wolf Creek	9	6	66.7	3	50.0	.333	3.50
251 Marsing	9	8	100.0	4	25.0	.250	4.09
831 Woodstock	2	0	-	-	-	-	-
TOTAL	83	49	59.9%	24	49.0%	.289	$4.22

07L/27L Spot Welder

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	18	16	88.9%	12	75.0%	.667	$4.01
350 Harper's Ferry	9	6	66.7	3	50.0	.333	4.25
070 Jacobs Creek	10	7	70.0	5	71.4	.500	3.08
009 Cass	8	5	62.5	3	60.0	.375	3.08
098 Ouchita	7	6	85.7	3	50.0	.429	3.82
305 Treasure Lake	1	1	100.0	1	100.0	1.00	7.00
084 Boxelder	21	17	81.0	5	29.4	.238	2.87
243 Collbran	12	8	66.7	4	50.0	.333	5.21
323 Weber Basin	1	1	100.0	1	100.0	1.00	3.94
144 Angell	35	21	60.0	2	9.5	.057	3.01
340 Ft. Simco	12	7	58.3	1	14.3	.083	5.94
737 Cleveland	1	1	100.0	1	100.0	1.00	4.99
741 LA	1	1	100.0	-	-	-	-
831 Woodstock	2	0	-	-	-	-	-
836 Whitney Young	10		20.0	-	-	-	-
431 Detroit	21	15	71.4	13	86.7	.619	3.64
817 Cincinnati	5	5	100.0	5	100.0	1.00	3.82
819 Mississippi	1	1	100.0	1	100.0	1.00	3.50
857 Tulsa	4	2	50.0	1	50.0	.250	3.50
442 San Jose	7	6	85.7	5	83.8	.718	3.74
443 San Jose	1	1	100.0	-	-	-	-
806 Hawaii	8	4	50.0	2	50.0	.250	3.25
905 Atterbury	54	31	57.4	11	35.5	.204	3.47
TOTAL	249	164	65.9	79	48.2%	.317	$3.75

07X/27X Construction Trades (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
058 LBJ	8	7	87.5	7	100.0%	.875	$3.33
300 Oconaluftee	37	25	67.6	8	32.0	.216	3.55
270 Mingo	26	19	73.1	13	68.4	.500	4.27
145 Wolf Creek	13	12	92.3	5	41.7	.386	3.51
251 Marsing	21	15	71.4	5	33.0	.238	4.25
343 Columbia Basin	14	12	85.7	9	75.0	.643	4.37
737 Cleveland	2	1	50.0	-	-	-	-
750 Excelsior Springs	17	17	100.0	11	64.7	.647	3.27
741 LA	2	2	100.0	1	50.0	.500	6.85
776 Tongue Point	12	11	91.7	8	72.7	.667	3.98
801 NJ	5	3	60.0	2	66.7	.400	2.80
431 Detroit	16	12	75.0	9	75.0	.563	2.58
816 Cincinnati	5	4	80.0	-	-	-	-
817 Cincinnati	1	1	100.0	-	-	-	-
818 Cincinnati	1	1	100.0	-	-	-	-
442 San Jose	15	14	93.3	10	71.4	.667	3.30
443 San Jose	1	1	100.0	1	100.0	1.00	3.50
446 San Jose	2	2	100.0	1	50.0	.500	3.00
905 Atterbury	18	12	66.7	5	41.7	.278	3.30
TOTAL	216	171	79.2%	95	55.6%	.440	$3.60

07/27 Construction Trades (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	14	7	50.0%	3	42.9%	.215	$4.07
716 Keystone	4	3	75.0	2	66.7	.500	5.18
701 Cleveland	5	4	80.0	3	75.0	.600	5.30
706 Excelsior Springs	7	4	57.1	1	25.0	.143	5.73
702 LA	6	5	83.3	3	60.0	.500	6.45
717 Tongue Point	14	11	78.6	7	63.6	.500	4.27
437 Detroit	1	0	-	-	-	-	-
845 Cincinnati	1	1	100.0	-	-	-	-
405 Phoenix	8	5	62.5	3	60.0	.375	5.50
407 Phoenix	4	4	100.0	4	100.0	1.00	5.33
934 Breckenridge	4	0	-	-	-	-	-
926 Atterbury	1	0	-	-	-	-	-
TOTAL	69	44	63.8%	26	59.1%	.377	$4.81

07A/27A Carpenter Construction (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	4	2	50.0%	2	100.0%	.500	$3.73
716 Keystone	1	1	100.0	-	-	-	-
701 Cleveland	1	1	100.0	-	-	-	-
405 Phoenix	3	2	66.7	2	100.0	.667	4.94
407 Phoenix	3	3	100.0	3	100.0	1.00	6.75
TOTAL	12	9	75.0%	7	77.8%	.583	$6.23

07B Electrician (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
717 Tongue Point	1	1	100%	1	100%	1.00	$3.00
934 Breckenridge	1	0	-	-	-	-	-
TOTAL	2	1	50%	1	100%	.500	$3.00

07C Cement Mason

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
702 LA	1	1	100%	-	-	-	-

07D/27D Brick/Stone Mason

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	1	0	-	-	-	-	-
405 Phoenix	1	1	100%	-	-	-	-
934 Breckenridge	1	0	-	-	-	-	-
TOTAL	3	1	33.3%	-	-	-	-

187

07E/27E Painter/Paperhanger (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	4	2	50.0%	-	-	-	-
702 LA	4	3	75.0	1	33.3%	.250	$6.75
716 Keystone	1	1	100.0	1	100.0	1.00	5.40
717 Tongue Point	1	0	-	-	-	-	-
405 Phoenix	2	0	-	-	-	-	-
407 Phoenix	1	1	100.0	1	100.0	1.00	5.07
934 Breckenridge	2	0	-	-	-	-	-
TOTAL	15	7	46.7%	3	42.9%	.200	$5.74

07I Plasterer (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
116 Keystone	1	1	100%	1	100%	1.00	$4.96
405 Phoenix	2	2	100%	1	50%	.500	8.00
TOTAL	3	3	100%	2	66.7%	.667	$6.48

07L Spot Welder (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
146 Angell	6	3	50.0%	1	33.3%	.167	$4.74
701 Cleveland	3	2	66.7	2	100.0	.667	5.50
702 LA	1	1	100.0	1	100.0	1.00	4.50
437 Detroit	1	0	-	-	-	-	-
845 Cincinnati	1	1	100.0	-	-	-	-
TOTAL	12	7	58.3%	4	57.1%	.333	$5.06

07X Other (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	1	1	100.0%	1	100.0	1.00	$4.90
706 Excelsior Springs	7	4	57.1	1	25.0	.143	5.73
717 Tongue Point	12	10	83.3	3	30.0	.250	5.85
926 Atterbury	1	0	-	-	-	-	-
TOTAL	21	15	71.4%	5	33.3%	.238	$5.64

Cluster 08/28 Electrical Appliance Repair (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
605 Arecibo	29	26	89.7%	21	80.8%	.724	$2.45
801 NJ	1	0	0	-	-	-	-
826 Pittsburgh	2	2	100.0	1	50.0	.500	3.81
836 Whitney Young	8	4	50.0	1	25.0	.125	4.50
854 Atlanta	1	1	100.0	1	100.0	1.00	3.00
442 San Jose	3	2	66.7	2	100.0	.667	3.75
443 San Jose	1	1	100.0	1	100.0	1.00	4.50
806 Hawaii	1	1	100.0	1	100.0	1.00	3.25
906 Breckenridge	106	69	65.1	8	11.6	.076	2.88
903 Gary	9	5	55.6	1	20.0	.111	3.00
TOTAL	161	111	68.9%	37	33.3%	.230	$2.71

08A Air Conditioning Repair Mechanic (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
836 Whitney Young	8	4	50.0%	-	-	-	-
906 Breckenridge	96	62	64.6	6	9.7%	.063	$2.79
903 Gary	6	4	66.7	1	25.0	.167	3.00
TOTAL	110	70	63.6%	7	10.0%	.091	$2.82

08B Air Conditioning Installer (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
906 Breckenridge	2	2	100.0%	-	-	-	-
903 Gary	2	1	50.0	-	-	-	-
TOTAL	4	3	75.0%	-	-	-	-

08C Electricial Appliance Repair (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
801 NJ	1	0	0	-	-	-	-

08E Office Machine Repair (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
806 Hawaii	1	1	100.0%	1	100.0%	1.00	$3.25
906 Breckenridge	8	5	62.5	1	40.0	.250	3.17
TOTAL	9	6	66.7%	3	50.0%	.333	$3.20

08G Electrician Helper (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
605 Arecibo	29	26	89.7%	21	80.8%	.724	$2.45
854 Atlanta	1	1	100.0	1	100.0	1.00	3.00
TOTAL	30	27	90.0%	22	81.5%	.733	$2.48

08X Other (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
876 Pittsburgh	1	1	100.0%	-	-	-	-
442 San Jose	3	2	66.7	2	100.0%	.667	$3.75
443 San Jose	1	1	100.0	1	100.0	1.00	4.50
TOTAL	5	4	80.0%	3	75.0%	.600	$4.00

Cluster 08/28 Electrical Appliance Repair (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	1	0	0	-	-	-	-
702 LA	1	0	0	-	-	-	-
807 Hawaii	1	1	100%	-	-	-	-
934 Breckenridge	2	1	50%	-	-	-	-
TOTAL	5	2	40%	-	-	-	-

08A Air Conditioning Ref. Mech. (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	1	0	0	-	-	-	-
807 Hawaii	1	1	100%	-	-	-	-
938 Breckenridge	2	1	50%	-	-	-	-
TOTAL	4	2	50%	-	-	-	-

08E Office Machine Repair (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
702 LA	1	0	0	-	-	-	-

Cluster 09/29 Industrial Production (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	1	1	100.0%	1	100.0%	1.00	$4.07
350 Harper's Ferry	13	11	84.6	5	45.4	.385	3.09
031 Pine Knot	29	21	72.4	10	47.6	.345	3.06
059 Schenck	29	26	89.7	20	76.9	.689	3.57
082 Blackwell	33	19	57.6	13	68.4	.394	4.31
109 Golconda	41	34	82.9	31	91.2	.756	3.95
009 Cass	10	9	90.0	8	88.9	.800	3.58
305 Treasure Lake	10	9	90.0	3	33.3	.300	2.75
051 Pine Ridge	7	3	42.9	3	100.0	.429	4.63
046 Trapper Creek	13	6	46.2	1	16.7	.077	2.72
172 Anaconda	46	37	80.4	25	67.6	.544	3.69
323 Weber Basin	23	15	65.2	12	80.0	.522	3.77
078 Curlew	15	11	73.3	5	45.5	.334	4.04
251 Marsing	8	4	50.0	2	50.0	.250	3.25
343 Columbia Basin	24	21	87.5	16	76.2	.667	3.55
502 Woodstock	1	1	100.0	–	–	–	–
605 Arecibo	21	19	90.5	17	89.5	.810	2.04
746 Charleston	1	1	100.0	–	–	–	–
770 Keystone	1	0	0	–	–	–	–
754 Albuquerque	7	1	14.3	1	100.0	.143	3.15
750 Excelsior Springs	5	5	100.0	4	80.0	.800	4.71
776 Tongue Point	6	6	100.0	4	66.7	.667	4.47
801 NJ	14	11	78.6	2	18.2	.143	3.62
826 Pittsburgh	20	16	80.0	10	62.5	.500	4.57
811 El Paso	15	11	73.3	9	81.8	.600	2.64
813 El Paso	3	3	100.0	2	66.7	.667	2.92
857 Tulsa	1	1	100.0	–	–	–	–
401 Phoeniz	20	7	35.0	3	42.9	.150	3.00
403 Phoenix	28	19	67.9	7	36.8	.250	2.87
442 San Jose	48	42	87.5	34	81.0	.709	3.41
443 San Jose	2	2	100.0	2	100.0	1.00	3.75
446 San Jose	10	7	70.0	5	71.4	.500	3.20
411 Portland	10	9	90.0	5	55.6	.500	4.41
413 Portland	4	4	100.0	3	75.0	.750	5.28
906 Breckenridge	260	160	61.5	87	54.4	.335	3.43
905 Atterbury	13	5	38.5	4	80.0	.308	3.67
903 Gary	246	177	72.0	120	67.8	.488	3.52
910 Clearfield	155	98	63.2	66	67.4	.426	3.47
TOTAL	1,193	832	69.7%	540	64.9%	.453	$3.52

09A Machine Operator (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
059 Schenck	1	0	0	-	-	-	-
442 San Jose	3	3	100.0%	2	66.7%	.667	$3.37
443 San Jose	1	1	100.0	2	100.0	1.00	4.25
903 Gary	8	4	50.0	1	50.0	.250	4.59
910 Clearfield	47	29	61.7	19	65.6	.405	3.26
TOTAL	60	37	61.7%	24	64.9%	.400	$3.42

09B Comb Welder (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
031 Pine Knot	28	20	83.3%	8	40.0%	.333	$3.09
059 Schenck	28	26	92.9	18	69.2	.643	3.61
082 Blackwell	8	3	37.5	-	-	-	-
109 Golconda	5	5	100.0	5	100.0	1.00	4.41
009 Cass	10	9	90.0	8	88.9	.800	3.58
305 Treasure Lake	10	9	90.0	3	33.3	.300	2.75
051 Pine Ridge	7	3	42.9	2	66.7	.286	5.75
078 Curlew	15	11	73.3	5	45.5	.334	4.04
251 Marsing	7	3	42.9	1	33.3	.143	2.25
343 Columbia Basin	24	21	87.5	15	71.4	.625	3.58
801 NJ	10	8	80.0	2	25.0	.200	3.62
826 Pittsburgh	4	4	100.0	1	25.0	.250	5.45
811 El Paso	15	11	73.3	9	81.8	.600	2.64
813 El Paso	3	3	100.0	1	33.3	.333	3.00
401 Phoeniz	1	1	100.0	-	-	-	-
403 Phoenix	2	1	50.0	-	-	-	-
411 Portland	10	9	90.0	5	55.6	.500	4.41
413 Portland	3	3	100.0	1	33.3	.333	6.20
906 Breckenridge	217	138	63.6	69	50.0	.318	3.58
903 Gary	184	140	76.1	91	65.0	.495	3.68
TOTAL	591	428	72.4%	244	57.0%	.413	$3.63

09C Sheet Metal Worker (male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
172 Anaconda	1	1	100.0%	1	100.0%	1.00	2.75
906 Breckenridge	31	20	64.5	3	15.0	.097	2.51
903 Gary	9	6	66.7	4	66.7%	.444	3.25
TOTAL	41	27	65.9%	8	29.6%	.195	$2.91

09D Furniture Upholsterer (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
605 Arecibo	21	19	90.5%	17	89.5%	.810	$2.04
413 Portland	1	1	100.0	1	100.0	1.00	4.00
903 Gary	26	18	69.2	6	33.3	.231	2.55
TOTAL	48	38	63.2%	24	63.2%	.500	$2.25

09E Electronics Assem. (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
509 Woodstock	1	1	100.0%	-	-	-	-
754 Albuquerque	7	1	14.3	1	100.0%	.143	$3.15
801 NJ	1	1	100.0	-	-	-	-
401 Phoenix	19	6	31.6	3	50.0	.158	3.00
403 Phoenix	26	18	69.2	7	38.9	.269	2.87
442 San Jose	34	30	88.2	25	83.3	.735	3.39
443 San Jose	1	1	100.0	1	100.0	1.00	3.25
446 San Jose	6	3	50.0	3	100.0	.500	3.33
906 Breckenridge	2	0	0	-	-	-	-
905 Atterbury	1	1	100.0	1	100.0	1.00	2.50
TOTAL	98	62	63.3%	41	66.1%	.418	$3.24

09F Offset Printer (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
350 Harper's Ferry	12	10	83.3%	4	40.0%	.333	$3.28
746 Charleston	1	1	100.0	-	-	-	-
776 Tongue Point	1	1	100.0	1	100.0	1.00	5.00
801 NJ	3	2	66.7	-	-	-	-
906 Breckenridge	10	2	20.0	-	-	-	-
905 Atterbury	12	4	33.3	2	50.0	.167	3.75
903 Gary	18	9	50.0	1	11.1	.056	2.50
910 Clearfield	8	6	75.0	3	50.0	.375	2.96
TOTAL	65	35	53.8%	11	31.4%	.169	$3.36

09H General Print Trade (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
903 Gary	1	0	0	-	-	-	-

09K Factory Assembler (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
910 Clearfield	1	1	100.0%	-	-	-	-
826 Pittsburgh	5	3	60.0	1	33.3%	.200	$2.50
TOTAL	6	4	66.7%	1	25.0%	.167	$2.50

09L Sewing Machine Operator (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
161 Flatwoods	1	1	100%	1	100%	1.00	$4.07

09X Other (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
082 Blackwell	25	16	64.0%	11	68.8%	.440	$4.32
109 Golconda	36	29	66.7	25	86.2	.575	3.86
046 Trapper Creek	13	6	46.2	-	-	-	-
172 Anaconda	45	36	80.0	24	66.7	.534	3.73
323 Weber Basin	23	15	65.2	11	73.3	.478	3.77
251 Marsing	1	1	100.0	1	100.0	1.00	4.25
770 Keystone	1	0	0	-	-	-	-
750 Excelsior Springs	5	5	100.0	4	80.0	.800	4.71
776 Tongue Point	5	5	100.0	3	60.0	.600	4.30
857 Tulsa	1	1	100.0	-	-	-	-
442 San Jose	11	9	81.8	3	33.3	.273	3.16
446 San Jose	4	4	100.0	2	50.0	.500	3.00
910 Clearfield	99	62	62.6	37	59.7	.374	3.77
350 Harper's Ferry	1	1	100.0	-	-	-	-
826 Pittsburgh	11	9	81.8	7	77.8	.637	4.55
TOTAL	281	199	70.8%	128	64.3%	.456	$3.89

Cluster 09/29 Industrial Production (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	43	28	65.1%	11	39.3%	.256	$2.89
716 Keystone	1	0	0	-	-	-	-
743 Charleston	6	6	100.0	6	100.0	1.00	2.82
709 Albuquerque	18	13	72.2	6	46.2	.334	2.63
710 McKinny	11	4	36.4	4	100.0	.364	3.38
715 Guthrie	94	38	40.4	10	26.3	.106	2.89
706 Excelsior Springs	15	10	66.7	9	90.0	.600	5.02
702 LA	1	1	100.0	-	-	-	-
717 Tongue Point	7	6	85.7	4	66.7	.572	3.48
407 Phoenix	7	4	57.1	3	75.0	.429	2.40
447 San Jose	1	1	100.0	1	100.0	1.00	2.88
415 Portland	1	1	100.0	1	100.0	1.00	2.47
934 Breckenridge	19	9	47.4	6	66.7	.316	2.60
914 Gary	3	1	33.3	1	100.0	.333	2.30
TOTAL	227	122	53.7%	62	50.8%	.273	$3.17

09B Comb.Welder (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
710 McKinney	11	4	36.4%	3	75.0%	.273	$3.75
415 Portland	1	1	100.0	-	-	-	-
934 Breckenridge	3	0	0	-	-	-	-
TOTAL	15	5	33.3%	3	60.0%	.200	$3.75

09C Sheet Metal Worker (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
934 Breckenridge	3	1	33.3%	-	-	-	-

09D Furniture Upholsterer (Female).

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
914 Gary	3	1	33.3%	1	100%	.333	$2.30

09E Electronics Assembler (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	1	0	0	-	-	-	-
709 Albuquerque	18	13	72.2%	3	23.1%	.167	$2.30
715 Guthrie	15	6	40.0	-	-	-	-
706 Excelsior Springs	1	0	0	-	-	-	-
407 Phoenix	7	4	57.1	3	75.0	.429	2.40
TOTAL	42	23	54.8%	6	26.1%	.143	$2.35

09F Offset Printer (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	43	28	65.1%	9	32.1%	.209	$2.93
743 Charleston	6	6	100.0	5	83.3	.833	2.66
715 Guthrie	61	25	41.0	3	12.0	.049	2.66
702 LA	1	1	100.0	-	-	-	-
717 Tongue Point	3	3	100.0	2	66.7	.667	2.95
934 Breckenridge	13	8	61.5	4	50.0	.308	2.42
TOTAL	127	71	55.9%	24	33.8%	.189	$2.76

09X Other (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
715 Guthrie	18	7	38.9%	3	42.9%	.167	$3.31
706 Excelsior Springs	14	10	71.4	9	90.0	.643	5.02
717 Tongue Point	4	3	75.0	2	66.7	.500	4.02
447 San Jose	1	1	100.0	1	100.0	1.00	2.88
TOTAL	37	21	56.8	15	71.4%	.405	$4.40

Cluster 10 - Transportation

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
10 A Truck Driver							
Anaconda (M)	9	6	66.7%	2	33.3%	.222	$3.15
Fort Simcoe (M)	9	5	55.6	1	20.0	.111	7.73
Kicking Horse (M)	5	3	60.0	-	-	-	-
TOTAL	23	14	60.9%	3	21.4%	.130	$4.67
10B Warehouseman							
McKinney (F)	29	17	58.6%	10	58.8%	.345	$2.69
Gary (M)	21	13	61.9	9	69.2	.428	3.42
TOTAL	50	30	61.9%	19	63.3%	.380	$3.04
10C Forklift Operator							
Keystone (M)	1	1	100.0%	-	-	-	-
Gary (M)	16	16	100.0	4	25.0%	.250	$2.93
TOTAL	17	17	100.0%	4	25.0%	.235	$2.93

Cluster 11 Health Occupations (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
707 Poland Sprg.	1	1	100%	1	100%	1.00	3.10
711 NJ	5	4	80%	4	100%	.800	4.40
705 Huntington	1	0	0	—	—	—	—
746 Charleston	2	2	100%	2	100%	1.00	2.67
770 Keystone	3	1	33.3%	1	100%	.333	2.40
737 Cleveland	4	4	100%	3	75%	.750	2.31
754 Albuquerque	2	0	0	—	—	—	—
750 Excelsior Sprg.	10	9	90%	3	33.3%	.300	2.64
740 L.A.	1	1	100%	1	100%	1.00	2.50
776 Tongue Pt.	2	0	0	—	—	—	—
852 Atlanta	2	2	100%	1	50%	.500	2.20
854 Atlanta	2	1	50%	1	100%	.500	3.13
431 Detroit	7	4	57.1%	1	25%	.143	2.50
811 El Paso	8	4	50%	1	25%	.125	2.30
857 Tulsa	7	4	57.1%	4	100%	.571	2.59
859 Tulsa	9	5	55.6%	5	100%	.556	3.00
401 Phoenix	3	1	33.3%	—	—	—	—
403 Phoenix	2	1	50%	1	100%	.500	2.63
442 San Jose	6	5	83.3%	4	80%	.667	2.92
446 San Jose	5	4	80%	4	100%	.800	2.56
806 Hawaii	1	0	0	—	—	—	—
411 Portland	4	2	50%	2	100%	.500	2.52
906 Breckenridge	6	4	66.7%	2	50%	.333	2.46
905 Atterburg	4	1	25%	1	100%	.250	3.00
903 Gary	6	3	50%	3	100%	.500	2.51
Total	103	63	61.2%	45	71.4%	.437	2.81

11A Nurse Assistant (Male)

	# Cat 1	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
707 Poland Spgs.	1	1	100%	1	100%	1.00	3.10
711 NJ	1	0	0	—	—	—	—
705 Huntington	1	0	0	—	—	—	—
746 Charleston	2	2	100%	2	100%	1.00	2.67
770 Keystone	2	0	0	—	—	—	—
737 Cleveland	2	2	100%	2	100%	1.00	2.32
754 Albuquerque	2	0	0	—	—	—	—
750 Excelsior Spgs.	9	8	88.9%	1	12.5%	.111	2.60
740 L.A.	1	1	100%	1	100%	1.00	2.50
776 Tongue Pt.	2	0	0	—	—	—	—
854 Atlanta	1	0	0	—	—	—	—
431 Detroit	6	4	66.7%	—	—	—	—
811 El Paso	8	4	50%	1	25%	.125	2.30
857 Tulsa	5	2	40%	2	100%	.400	2.25
859 Tulsa	8	5	62.5%	5	100%	.625	3.00
401 Phoenix	3	1	33.3%	—	—	—	—
403 Phoenix	2	1	50%	1	100%	.500	2.63
442 San Jose	1	1	100%	1	100%	1.00	2.70
446 San Jose	1	1	100%	1	100%	1.00	2.50
411 Portland	4	2	50%	2	100%	.500	2.52
906 Breckenridge	6	4	66.7%	2	50%	.333	2.46
905 Atterburg	4	1	25%	1	100%	.250	3.00
903 Gary	6	3	50%	3	100%	.500	2.51
Total	78	43	55.1%	26	60.5%	.333	2.62

11B Dental Assistant (Male)

	# Cat. I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
770 Keystone	1	1	100%	1	100%	1.00	2.40
806 Hawaii	1	0	0	—	—	—	—
Total	2	1	50%	1	100%	.500	2.40

11C Lic Prac. Nurse (Male

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
711 NJ	4	4	100%	4	100%	1.00	4.40
854 Atlanta	1	1	100%	1	100%	1.00	3.13
Total	5	5	100%	5	100%	1.00	4.15

11D Vet. Asst. (Male)

	# Cat. I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
442 San Jose	1	1	100%	1	100%	1.00	3.00

11F EKG Technician (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
431 Detroit	1	0	0	—	—	—	—
442 San Jose	2	2	100%	—	—	—	—
Total	3	2	66.7%	—	—	—	—

11I Lab Asst. Med. & Tech. (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
852 Atlanta	2	2	100%	1	50%	.500	2.20

11K Psychiatric Aide (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
750 Excelsior Spgs.	1	1	100%	1	100%	1.00	2.88

11L X-Ray Tech. Asst.

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
757 Cleveland	1	1	100%	—	—	—	—

11X Other (Male)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
737 Cleveland	1	1	100%	—	—	—	—
857 Tulsa	2	2	100%	1	50%	.500	3.24
859 Tulsa	1	0	0	—	—	—	—
442 San Jose	2	1	50%	1	100%	.500	3.00
446 San Jose	4	3	75%	3	100%	.750	2.58
Total	10	7	70%	5	71.4%	.500	2.80

Cluster 11 Health Occupations (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	58	40	69%	31	77.5%	1534	2.60
716 Keystone	97	51	52.6%	29	56.9%	.299	2.78
770 Blueridge	26	10	38.5%	7	70%	269	2.20
743 Charleston	3	3	100%	2	66.7%	.667	2.57
701 Cleveland	142	68	47.9%	42	61.8%	.296	2.67
738 Cleveland	3	3	100%	3	100%	1.00	2.46
709 Albuquerque	59	19	32.2%	11	57.9%	.186	2.34
710 McKinney	90	49	54.4%	39	79.6%	.433	2.34
715 Guthrie	137	78	56.9%	51	65.4%	.372	2.48
756 Albuquerque	1	0	0	-	-	-	-
706 Excelsior Spgs	128	86	67.2%	57	66.3%	.445	2.53
702 L.A.	38	25	65.8%	22	88%	.579	3.07
742 L.A.	28	27	96.4%	23	85.2%	.822	3.30
717 Tongue Pt.	62	40	64.5%	35	87.5%	.565	3.03
851 Atlanta	80	51	63.8%	30	58.8%	.375	2.42
853 Atlanta	44	26	59.1%	12	46.2%	.273	2.31
437 Detroit	20	10	50%	9	90%	.450	2.47
845 Cinacinnati	1	0	0	-	-	-	-
849 El Paso	18	7	38.9%	6	85.7%	.333	2.41
405 Phoenix	17	10	58.8%	6	60%	.353	2.36
407 Phoenix	14	7	50%	5	71.4%	.357	2.74
807 Hawaii	1	1	100%	-	-	-	-
415 Portland	6	4	66.7%	4	100%	.667	2.60
417 Portland	1	1	100%	1	100%	1.00	2.50
934 Breckenridge	67	35	52.2%	22	62.9%	.329	2.38

Cluster 11 Health Occupations (Female) (continued)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
926 Atterbur	9	3	33.3%	2	66.7%	.222	2.55
914 Gary	9	4	44.4%	4	100%	.444	2.52
Total	1159	658	56.8%	453	68.8%	.391	2.57

11A Nurse Assistant (Female)

	#Cat I	#Placed	%Placed	#JTM	%JTM	P/JTM Rate	JTM Wage
703 Charleston	57	39	68.4%	30	76.9%	.526	2.62
716 Keystone	71	37	52.6%	22	59.5%	.313	2.62
720 Blue Ridge	11	6	54.5%	4	66.7%	.364	2.30
743 Charleston	3	3	100%	2	61.7%	.667	2.57
701 Cleveland	109	52	47.7%	32	61.5%	.293	2.59
738 Cleveland	3	3	100%	3	100%	1.00	2.46
709 Albuquerque	53	16	30.2%	9	56.3%	.170	2.32
710 McKinney	90	49	54.4%	37	75.5%	.411	2.43
715 Guthrie	122	74	60.7%	49	66.2%	.402	2.49
756 Albuquerque	1	0	0	-	-	-	-
706 Excelsior Spgs.	100	65	65.0%	39	60%	.390	2.37
702 LA	13	5	38.5%	4	80%	.308	2.66
742 LA	12	12	150%	9	75%	.750	3.18
717 Tongue Pt.	32	21	65.6%	19	90.5%	.594	2.68
851 Atlanta	62	39	62.9%	22	56.4%	.355	2.43
853 Atlanta	40	25	62.5%	10	40%	.250	2.27
437 Detroit	19	10	52.6%	9	90%	.474	2.47
845 Cincinnati	1	0	0	-	-	-	-
849 El Paso	18	7	38.9%	6	85.7%	.333	2.41
405 Phoenix	17	10	58.8%	5	50%	.294	2.42
407 Phoenix	13	6	46.2%	4	66.7%	.308	2.49

11A Nurse Assistant (Female)

	#Cat I	#Placed	%Placed	#JTM	%JTM	P/JTM Rate	JTM Wage
807 Hawaii	1	1	100%	-	-	-	-
415 Portland	6	4	66.7%	4	100%	.667	2.60
417 Portland	1	1	100%	1	100%	.100	2.50
934 Breckingridge	67	35	52.2%	22	62.9%	.329	2.38
926 Atterbury	9	3	33.3%	2	66.7%	.222	2.55
914 Gary	9	4	44.4%	4	100%	.444	2.52
TOTAL	920	527	57.3%	348	66.0%	.378	2.50

11B Dental Assistant (Female)

	#Cat I	#Placed	%Placed	#JTM	%JTM	P/JTM Rate	JTM Wage
716 Keystone	1	1	100%	1	100%	1.00	2.50
701 Cleveland	3	2	66.7%	-	-	-	-
709 Albuquerque	5	3	60%	2	66.7%	.400	2.36
706 Excelsior Spg.	5	4	80%	2	50%	.400	3.18
702 LA	2	1	80%	1	100%	.500	3.00
742 LA	6	6	100%	6	100%	1.00	2.89
717 Tongue Pt	22	14	63.6%	11	78.6%	.500	3.66
TOTAL	44	31	705%	23	74.2%	.523	3.23

11C Lic. Prac. Nurse (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
720 Blue Ridge	2	1	50%	1	100%	.500	1.75
706 Excelsior Spgs.	4	4	100%	4	100%	1.00	3.69
702 LA	9	8	88.9%	3	37.5%	.333	3.68
742 LA	9	8	88.9%	2	25%	.222	3.87
407 Phoenix	1	1	100%	1	100%	1.00	3.75
Total	25	22	88%	11	50%	.440	3.55

11D Vet. Asst. (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	1	0	0	-	-	-	-
702 LA	5	2	40%	-	-	-	-
742 LA	1	1	100%	1	100%	1.00	2.50
Total	7	3	42.9%	1	33.3%	.143	2.50

11E Physical Therapy (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	4	2	50%	1	50%	.250	2.77
701 Cleveland	3	1	33.3%	-	-	-	-
706 Excelsior Spgs	5	2	40%	-	-	-	-
Total	12	5	41.7%	1	20%	.083	2.77

11F EKG Technician (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	4	4	100%	4	100%	1.00	3.90
720 Blue Ridge	2	1	50%	-	-	-	-
701 Cleveland	5	2	40%	-	-	-	-
706 Excelsior Spgs	4	4	100%	3	75%	.750	2.56
Total	15	11	73.3%	7	63.6%	.467	3.33

11H Inhalation Therapist (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
701 Cleveland	5	3	60%	2	66.7%	.400	3.80

11 I Lab. Asst. Med. and Tech. (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
703 Charleston	1	1	100%	-	-	-	-
701 Cleveland	4	3	75%	1	33.3%	.250	3.70
706 Excelsior Spgs	2	1	50%	-	-	-	-
702 LA	2	2	100%	2	100%	1.00	3.37
Total	9	7	77.8%	3	42.9%	.333	3.48

11K Psychiatric Aide (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	3	3	100%	1	33.3%	.333	2.30
706 Excelsior Spgs	4	4	100%	4	100%	1.00	2.73
702 LA	2	2	100%	1	50%	.500	3.50
Total	9	9	100%	6	66.7%	.667	2.79

11L X-Ray Tech. Asst. (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	3	3	100%	-	-	-	-
701 Cleveland	3	1	33.3%	-	-	-	-
Total	6	4	66.7%	-	-	-	-

11M Hosp. Diet Aide (Female)

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	7	2	14.3%	-	-	-	-
720 Blue Ridge	11	3	18.2%	-	-	-	-
701 Cleveland	6	3	50%	-	-	-	-
715 Guthrie	13	3	23.1%	1	33.3%	.077	2.30
Total	37	9	24.3%	1	11.1%	.027	2.30

11X Other Female

	# Cat I	# Placed	% Placed	# JTM	% JTM	P/JTM Rate	JTM Wage
716 Keystone	4	0	0	-	-	-	-
701 Cleveland	3	1	33.3%	1	100%	.333	3.27
709 Albuquerque	1	0	0	-	-	-	-
715 Guthrie	1	0	0	-	-	-	-
706 Excelsior Spgs	4	2	55%	-	-	-	-
702 LA	5	5	100%	3	60%	.600	2.46
717 Tongue Pt.	7	5	71.4%	3	60%	.429	2.99
851 Atlanta	12	9	75%	5	55.6%	.417	2.52
853 Atlanta	3	1	33.3%	1	100%	.333	2.50
Total	40	23	57.5	13	56.5%	.325	2.67

AN ASSESSMENT OF CENTER EDUCATIONAL PROGRAMS IN JOB CORPS

Barry Argento
Arlene Malech
Danielle Shultz

February 1979

Office of Youth Programs
Report Number 12

The Job Corps is a primary alternate education mechanism. It serves youth who have mostly failed in or been failed by the education system. Seven of eight enrollees have not completed high school. The medium achievement level is below the sixth grade level.

Job Corps provides comprehensive education opportunities. The basic education program consists of a standard set of materials graded for skill level, with a unit system of instruction and progression. There is a low student/teacher ratio to allow individualized attention. When students progress to roughly the 8th grade achievement level, they are usually placed in the General Equivalency Degree program. This, too, is a standardized package of self-placed units. Finally, a new off-center Advanced Career Training Program in Colleges and Post Secondary Vocational Institutes has been instituted to provide the full range of Job Corps services and support for corpsmembers who continue their education in colleges and vocational schools.

Educational gains testing was abandoned in 1974 and in the 1970's until the last two years little attention was paid to the quality of educational programs. There is now a concerted effort to upgrade materials, revise curricula and experiment with new approaches. Revised GED and basic reading programs are being introduced. An Educational Improvement Effort is underway which will carefully experiment with alternative educational approaches to determine relative cost and effectiveness in the Job Corps setting.

This study of education in Job Corps is based on site visits to a large number of centers, interviews with teachers and corpsmembers. There is also a survey of the alternative for education in Job Corps. The purpose of this assessment was to determine the state of education in centers as well as to lay the groundwork for the Educational Improvement Effort. Some of the findings are significant:

o Both teachers and students give quite positive ratings to center educational programs. The materials and approaches are clearly effective for this group and in this setting.

o Both students and teachers perceive the need for and respond to supplementary materials. In an individualized system, supplements to a basic program are clearly needed to meet differing interests and ability. Most centers have, indeed, supplemented the core Job Corps programs.

o Students and teachers perceive the need for and respond to low student/teacher ratios. In most centers, the ratio is less than 15/1. Most also use student assistants.

o Where teachers are positive, students tend to be positive and vice versa. It is somewhat disturbing that years of teaching are inversely correlated with attitude. Teachers may "burn out" or perhaps the salary gradients are not adequate to maintain the enthusiasm of teachers with greater security.

Robert Taggart
Administrator
Office of Youth Programs

TABLE OF CONTENTS

I. Introduction 253

II. The Basic Education Director Questionnaire 255

III. Teacher Attitude Questionnaire 269

IV. Student Attitude Questionnaire 277

V. Recommendations 283

APPENDICES

Appendix A: Sampled Centers 287

Appendix B: Attitude Item Means by Region, Teacher Attitude Questionnaire 293

Appendix C: Attitude Item Means by Region, Student Attitude Questionnaire 297

Appendix D: A Summary of Literature on Education in Job Corps 301

LIST OF TABLES

Table I: Description of Sample.. 253

Table 2: Perceived Effectiveness of the RJS and MJS Tests.......... 257

Table 3: Administrative Personnel for Tests......................... 258

Table 4: Use of MJS1, MJS2, and RJS1 to Measure Educational Gains.. 259

Table 5: GED Data.. 260

Table 6: How Students Enter the GED Program......................... 261

Table 7: Percentages of Students Who Pass the GED Test and Meet State Certification Requirements......................... 263

Table 8: Teacher/Student Ratios....................................... 265

Table 9: Teacher Attitude Questionnaire: Total Score Frequency Distribution... 271

Table 10: Teacher Attitude Questionnaire, Item Means............... 272

Table 11: Teacher Attitude Correlations.............................. 274

Table 12: Corpsmember Attitude Questionnaire........................ 278

Table 13: Student Attitude Questionnaire............................ 279

Table 14: Student Attitude Correlations.............................. 281

EDUCATIONAL IMPROVEMENT EFFORT QUESTIONNAIRE REPORT

Barry Argenta
Arlene Malech

I. INTRODUCTION

The Educational Improvement Effort (EIE) preliminary questionnaires were designed to provide baseline information to aid in the determination of the need for and the methods of improving the Job Corps Basic Education and GED programs. The data contained in this report were obtained from a sample of 39 Job Corps centers. Of these, 15 were Civilian Conservation Centers (CCCs) and 24 were Contract Centers. The breakdown of centers by region is as follows:

TABLE 1
Description of Sample

Region	Contract	CCC	Total
3	5	0	5
4	4	4	8
5	3	1	4
6	5	3	8
7 & 8	3	4	7
9	2	0	2
10	2	3	5

This yielded 39 interviews with basic education directors or their designees, about 380 interviews with teachers, and approximately 800 interviews with corpsmembers. A complete listing of the sampled centers may be found in appendix A.

Specifically, the Basic Education Director Questionnaire yielded current data relating to such things as: what ongoing recordkeeping practices are; what tests, if any, are routinely being used to measure educational gains; what is the success rate of the existing GED program; and what corporate-and/or center-developed materials are being used to supplement the basic program. The Teacher and Student Attitude Questionnaires were designed to provide information about some of the feelings of these two groups toward the existing Basic Education and GED programs.

In addition to the analyses run on the attitude questionnaires, supplemental correlations were computed using Job Corps management information in an effort to more fully describe the current status of the existing program in terms of such things as cost for materials, termination rates, and cost for educational personnel. These correlations provided the opportunity to perform analyses utilizing relevant portions of the attitude questionnaires rather than the score on the total instrument.

The content area of this report is divided into four main areas: section II contains the results of the Basic Education Director Questionnaires; section III contains the analysis of the Teacher Attitude Questionnaires; section IV contains the analysis of the Student Attitude

II. THE BASIC EDUCATION DIRECTOR QUESTIONNAIRE

The purpose of the Basic Education Director Questionnaire was informational. It was not designed to enable any detailed statistical analysis of the results. Its focus was to discern existing staffing patterns, recordkeeping procedures, testing mechanisms, and modifications to the Basic Education and GED programs. The rationale for this purpose was twofold: (1) to ascertain the current status of the Job Corps education program, and (2) to aid in the determination of which centers to use for new model field testing and what types of models would be appropriate.

Because the items on the questionnaire were not structured to facilitate statistical analysis, results were merely tabulated. Percentages have been calculated on the basis of the total number of basic education directors responding to each item. Results are discussed in sections that correspond to the major divisions of the questionnaire.

Educational Matters

1. Educational Gains

Most centers are using the entry testing programs provided by Job Corps (the longstanding MJS1, MJS2, and RJS1 tests) for initial assignments into educational programs. Of the centers surveyed, 92.5 percent are using the MJS1 and MJS2 tests for mathematics placement, and 93.5 percent administer the RJS1 test for reading

Questionnaires; and section V contains recommendations for possible policy changes and for the EIE study based on the results of these questionnaires.

The researchers wish to express their gratitude to center staff and corpsmembers whose cooperation made this study possible. Without them, a research effort of this magnitude could not have been undertaken.

placement. Although the RJS and MJS tests are widely used, there are varying opinions concerning the effectiveness of these tests in determining educational competencies. A breakdown of this data may be found in table 2.

TABLE 2

Perceived Effectiveness of the RJS and MJS Tests

Perceived Effectiveness		RJS1	MJS1	MJS2
(Low)	1	14%	14%	3%
	2	16%	8%	3%
	3	31%	24%	17%
	4	27%	40%	36%
(High)	5	11%	14%	36%
(Don't know)		1%		5%

A wide variety of individuals appear to be administering these tests. Table 3 shows the percentage of centers indicating administration personnel for the RJS and MJS tests.

TABLE 3

Administrative Personnel for Tests

Administrator	Percent of Centers Reporting	
	MJS1 and MJS2	RJS1
Teacher	33%	31%
Counselor	7%	3%
Orientation Specialist	20%	17%
Testing Specialist	11%	15%
Other	30%	34%

Data also indicate that there is no consistent time across centers when these tests are being administered. Eighty-two percent of the surveyed centers administer these tests during corpsmember orientation week, but the day varies. Literature in the field of measurement indicates that many factors may influence test results: among these are numerous conditions within the individual. It is possible that placement results may be influenced by newness of surroundings, homesickness, the test administrator, etc.

For these reasons, a fairly standard administration time for placement tests may be beneficial. While a procedure such as this could not guarantee consistency of corpsmember placement across centers, it may serve to minimize, at least, some of these extraneous factors.

Educational gains are being measured in approximately 88 percent of the centers; however, a wide variety of instrumentation is being used for this purpose. Very few centers are using the MJS1 and MJS2 and/or the RJS1 to measure educational gains. Table 4 presents these percentages.

TABLE 4

Use of MJS1, MJS2, and RJS1 to Measure Educational Gains

Use for Gain Measurement	MJS1 and MJS2	RJS1
Yes	14%	4%
No	86%	96%

A wide variety of gains-testing instrumentation is being used. The SAT, Woodcock, LAC, and Sullivan tests are being used for reading pre-tests; LAC and SAT are being used for reading post-tests. For the mathematics program, centers indicate that the Woodcock/Key Math, American Guild, SAT, Section D/Unit Tests, and MJS1 are being used. These results indicate that enough divergence of instrumentation is being used that little comparative gain score information from one center to another could be considered valid.

Maintenance and storage of the test data vary widely from teachers' files to computer storage, with approximately 50 percent of the centers indicating that teachers do maintain these records, at least initially. Of the centers reporting, 60 percent state that educational gains records are only maintained while the corpsmember is on center, while 33 percent indicate that they maintain these records longer than 12 months after the corpsmember leaves. Again, these data demonstrate little consistency across centers.

2. GED Program

The data on the GED program provided relevant information about the existing curriculum and its implementation. Because of the wide variation in the size of the surveyed centers, there is considerable diversity in the number of corpsmembers who enter the GED program on a per month basis. Seventy-two percent of the surveyed centers report 30 or fewer entering GED students per month. The remaining centers have anywhere from 30 to 100 corpsmembers entering the GED program on a per month basis. Although this diversity is quite large, it is consistent with researcher expectation.

TABLE 5*

GED Data

Region	Total Job Corps Enrollment	Corpsmembers Eligible For GED		Eligible Corpsmembers Actually Enrolled in GED		GED Enrollees Completing GED	
		Number	Percent	Number	Percent 1/	Number	Percent
3	6,894	1,081	16%	695	64%	621	89%
4	18,471	3,690	20	2,125	58	785	37
5	6,039	714	12	635	89	344	54
6	23,660	4,157	18	1,997	48	1,530	77
7 & 8	14,960	1,852	12	1,673	90	1,436	86
9	3,281	823	25	562	68	472	84
10	8,127	1,825	22%	1,572	86%	814	52%

* Based on Job Corps National Office Data

1/ All percentages are rounded.

Basic education directors were asked to distinguish between students who enter the GED program when they arrive on center and those who come through the Basic Education program. Table 6 contains that data.

TABLE 6

How Students Enter the GED Program

Percentage of Total GED Enrollment	Percentage of Centers Reporting	
	Students Enter GED on Arrival	Students Enter GED through Basic Education
Below 10%	33%	3%
10-20%	15%	0%
20-30%	15%	8%
30-40%	15%	3%
40-50%	3%	3%
50-60%	8%	8%
60-70%	0%	8%
70-80%	5%	11%
80-90%	3%	14%
90-100%	3%	42%

Eighty-seven percent of the centers surveyed report that students are placed in the GED program on the basis of test scores, but data also indicate that there is little, if any, consistency in the utilized placement tests.

The SAT advanced test is used by 55 percent of the centers reporting; 31 percent use MJS1 and RJS1, while 14 percent use other instruments. This suggests that comparable test criteria for placement into GED do not exist across centers. A further implication is that a single standard of test performance is not used for GED placement.

Approximately 29 percent of the reporting centers indicate that students can be placed into the GED program on the basis of criteria other than test scores or counselor recommendation. Placement into GED is further confounded by the fact that students can, in at least one center, be placed into the GED on the basis of only the counselor's recommendation. This further illustrates the lack of consistency of placement procedures across centers.

The percentage of students who have successfully completed the GED program and test during the last three months and the percentage meeting state certification requirements also vary dramatically across centers. There is no discernible causation pattern from this survey. The data are presented in table 7.

TABLE 7

Percentages of Students Who Pass the GED Test and Meet State Certification Requirements

Percentage of Students	Percentage of Centers Reporting	
	Pass GED Test	Meet Certification Requirements
Below 10%	6%	0%
10-20%	11%	8%
20-30%	17%	11%
30-40%	6%	8%
40-50%	6%	5%
50-60%	14%	5%
60-70%	9%	5%
70-80%	6%	13%
80-90%	9%	11%
90-100%	17%	34%

Approximately 76 percent of the centers report that it takes three to six months for a student to complete the GED program. Only 11 percent of the centers report that they administer the GED test on center. A decision as to when the student is ready to take the GED test is made by the GED teacher in approximately 76 percent of the centers. In the remaining centers, a decision is made by the corpsmember, the counselor, the basic education supervisor, or another individual. For the 89 percent of the centers which send students to other locations to take the GED test, there is no single test location type. Some use the facilities of local high schools or colleges, while others use learning centers, county education offices, or career centers. There is no way to determine how comparable these testing facilities are or whether differential conditions affect the test result.

3. Innovative Materials in the Instructional Program

Data indicate that the majority of the surveyed centers are using either center- or corporate-developed materials to supplement the standard educational program required by Job Corps national policy. In the area of basic education, 84 percent of the centers report that they are using such materials, while 67 percent say that they are using them for the GED program. This fact results in an inference that the testing of new models should probably be done on an intracenter rather than an intercenter basis because the education program may vary widely from center to center. Approximately 80 percent of the reporting centers state that their supplemental materials are vocationally oriented; 33 percent of the sampled centers state that they have made changes to the prescribed basic education curriculum which they believe are making it more effective and efficient.

B. Staffing Patterns

Staffing patterns and teacher/student ratios vary from center to center. Table 8 presents the teacher/student ratio data.

TABLE 8

Teacher/Student Ratios

Ratio	Percent of Centers Reporting		
	GED	Math	Reading
Below 1:10	9%	6%	6%
1:10	14%	6%	18%
1:15	39%	47%	44%
1:18	17%	18%	20%
1:19	6%	0%	0%
1:20	6%	20%	9%
1:25	9%	3%	3%

A teacher/student ratio of 1:18 is considered to be the maximum that should be evidenced within the Job Corps program. These data show that 21 percent of the surveyed centers have ratios greater than this within GED; 23 percent in mathematics; and 12 percent in reading. This appears to demonstrate that at least some of the centers are currently understaffed.

Salary ranges for teachers also differ significantly, with the minimum salary as low as $9,500 and the maximum salary as high as $26,900. Data obtained from the teachers as part of the attitude questionnaire indicate that teachers are not being comparably paid for experience across centers. There is apparently no consistency in salary range or in criteria for salary evident at this time.

Qualifications for teachers also appear to show some variations. Ninety percent of the centers reporting state that a bachelor's degree is required; 68 percent report that a state certificate is necessary; and 30 percent say that experience is necessary. There are, additionally, other differences relating to such things as areas of expertise and experience with minority/disadvantaged youth. Approximately 92 percent of the centers reporting believe that their staff is above average with regard to meeting minimum qualifications, and, yet, 33 percent of the sampled centers feel that minimum teacher requirements should be changed, while 67 percent do not want a change.

The information on teacher aides provided valuable data. Eighty-four percent of the centers report that they do use teacher aides in the Basic Education programs, and 81 percent state that they use aides in the GED program. However, the type of aide utilized varies widely. The majority, 70 percent, are corpsmembers, while others include volunteers, interns, and CETA enrollees.

Qualifications vary from anyone who has completed the Job Corps mathematics and reading programs to two years of college. Training ranges from none to the same training as instructors receive. Salary ranges from none to $12,334 per year. Only 6 percent of the surveyed centers report that they have a vocational training cluster for aides. Again, because of differences in both qualifications and training, comparisons relating to the functioning of aides cannot be made on a center-to-center basis.

C. Accreditation

Carnegie units or high school credits that will be accepted by the states can be given in only 16 percent of the centers sampled. Only three centers report that they are accredited to issue a state high school diploma.

D. Placement Data

Approximately 63 percent of the centers report that they do keep placement data on corpsmembers other than on Form 72 which is gathered on termination; however, the type of data which is maintained appears to vary widely. Approximately 26 percent of the centers which maintain placement data keep records for 9-12 months, while 74 percent keep them longer than 12 months. Maintenance of follow-up data also varies dramatically. What is seemingly evident from the data collected to date is that there is no consistent procedure apparent within the Job Corps for maintaining placement and/or follow-up data on corpsmembers beyond the standard termination documentation.

E. Inferences

There are several inferences which can be drawn from the data on the Basic Education Director Questionnaire. The first of these is that the teacher/student ratios lead one to believe that some centers may well be understaffed or are having difficulty filling vacancies. The number of vacancies vs authorized slots is a major indicator of this. While aides are used in most centers, differential qualifications and training imply a lack of consistent utilization of these individuals to reduce teacher/student ratios and increase the one-to-one contact so vital to the effective use of programmed materials.

There is apparently no single totally consistent Basic Education or GED program in use in Job Corps centers. The core program is supplemented and adapted in a number of ways. Additionally, there is little consistent placement testing or gain testing procedure in evidence within the Job Corps at the present time. Coupled with this is the fact that there is no standardized recordkeeping procedure currently being utilized that yields the type of data needed on educational gains to continually update and improve the program.

III. TEACHER ATTITUDE QUESTIONNAIRE

The analysis of the Teacher Attitude Questionnaire was based on the tabulation of item means and the correlation between the total score on the attitude questionnaire and the demographic information which was asked. Additional correlations were computed utilizing portions of the questionnaire. The calculation of the item mean provided information concerning general attitude on the specific question content. Calculation of the correlations provided information on whether there was a relationship between attitude and demographic data. It was believed that, if there were fairly strong correlations, the demographic data might be used as predictors of attitude.

Approximately 380 teachers in both contract and conservation centers were interviewed during the course of the study. The attitude items which were asked were based on a 5-point Likert scale. On this type of scale, the ideal item mean is 3--the point of neutral opinion. If the item mean is 3, the inference is that there is a balanced mix between positive and negative attitudes. Only in this instance can the item have maximum potential to discriminate between persons of positive and negative attitudes. As the item mean departs from 3, the item is less and less capable of discriminating between these attitudes.

For this questionnaire, the researchers determined that a high total score demonstrated a positive attitude toward the referent (teaching in Job Corps) and that, correspondingly, a low total score meant a negative attitude. Using this as an overall rationale, it can be seen that an item with a mean greater than 3 ($\bar{X} > 3$) shows that people feel positively about the object of the question and that an item mean less than 3 ($\bar{X} < 3$) illustrates that they feel negatively about the subject. Scaling of each item took into account the positive or negative phraseology of each statement.

The frequency distribution of total scores for this sample may be found in table 9. The shaded portion of the graph includes all of the results above the midpoint of the possible score range (i.e., positive attitude). This suggests that teachers have a quite positive attitude about the Job Corps education program.

Analysis was performed on the 100 questionnaires with both the highest and lowest total scores (n=200). Consultation with expert statisticians and evidence from previous research showed that calculations based on a sample of this size are very close to those which would be obtained on data from the total available sample. The amount of measurement error involved in using this procedure has been shown to be very small. Table 10 presents the results which were obtained from the sample of 200 teachers. Results broken down into regional data may be found in appendix A.

As can be seen from the item means, the teachers feel that their centers are good places to work in and that administrators treat them fairly (items 1 and 4). They also feel quite strongly that their jobs are both interesting and challenging (item 2). Additionally, while their feeling about the adequacy of the existing educational program is basically

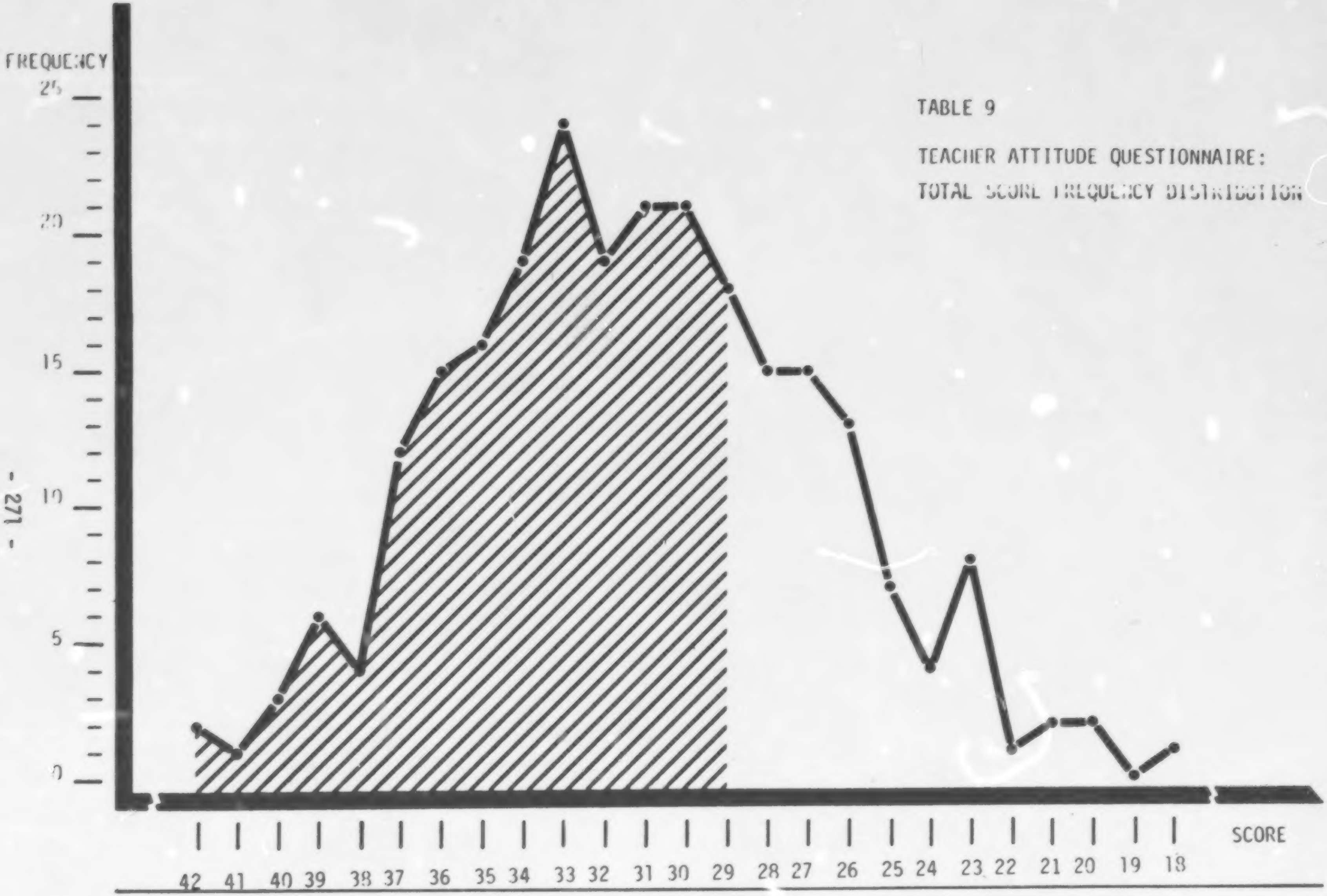

TABLE 9

TEACHER ATTITUDE QUESTIONNAIRE:
TOTAL SCORE FREQUENCY DISTRIBUTION

TABLE 10

Teacher Attitude Questionnaire
Item Means

Item Number	Item	Item Mean
1	This center is a good place for a teacher to work.	3.85
2	This job is interesting and challenging.	4.29
3	I get enough recognition for the task I'm performing.	3.33
4	The center administration treats me fairly.	3.67
5	If Job Corps teachers were paid more, they would be more effective teachers.	2.78
6	The materials and learning system which I use are not adequate for the task.	3.03
7	There are new materials that could help me do a better job in my area.	4.14
8	I would like to be able to develop curriculum materials on my own.	4.08
9	Working with programmed instructional materials gets boring for a teacher.	2.78
10	The students would be more receptive, depending on what I did.	4.30
Overall Average		3.70

neutral (item 3), they firmly believe that there are new materials which could help them to do a better job (item 7). The desire of teachers for new educational materials is bolstered by their belief that they can successfully influence student motivation (item 10).

A correlation coefficient represents a measure of association between two things. The range of the correlation coefficient (Pearson Product Moment) is from -1 to +1 with 0 showing no relationship ($r=-1<0<+1$). The interpretation of this statistic is that a correlation greater than 0 ($r>0$) means that the relationship is positive, and a correlation less than 0 ($r<0$) means that the relationship is negative or inverse. As the correlation coefficient departs from 0 and gets closer to either -1 or +1, the relationship between the two factors is said to be stronger. (Illustration: A correlation of $r=+.8$ between salary and attitude would show that as salary increases, attitude becomes more positive. A relationship of $r=-.6$ between salary and attitude would show that as salary increases, attitude becomes more negative.)

It should be noted that correlations cited in this report can be meaningful despite their seemingly small size. The magnitude of the correlation coefficient can be attenuated by both sample size and range of the data. Thus, for larger samples or for data with a wider range, the described relationships might be stronger. The correlations presented herein should be interpreted in that light. Table 11 contains the relevant correlations computed utilizing teacher attitude data.

TABLE 11

Teacher Attitude Correlations

Correlation	Result
Number of years teaching/total teacher attitude score	-.23
Number of years teaching in Job Corps/total teacher attitude score	-.20
Teaching hours per day/total teacher attitude score	.03
Salary/total teacher attitude score	.09
Teacher question 5/salary for teachers	.13
Average of teacher questions 1, 2, and 3/salary	-.26
Average of teacher questions 1, 2, and 3/number of years teaching	-.23
Average of teacher questions 1. 2, and 3/teaching hours per day	.24
Average of teacher questions 1, 2, and 3/student:teacher ratios	-.23
Average yearly cost for education per CMY/teacher overall satisfaction with administration	.22
Average yearly cost for materials/teacher question 6	.18
Average yearly cost for materials/teacher question 7	-.02
Average yearly cost for materials/average of teacher questions 6 and 7	.14

Several interesting conclusions are suggested by these correlations, although in most cases the results are more significant in terms of direction than in terms of degree of correlation.

1. Satisfaction and attitude toward the Job Corps education program declines with length of teaching experience and tenure in the program.

2. Longer teaching hours per day do not undermine satisfaction and attitude. In all likelihood, the teachers with less seniority have longer hours, so the more positive views of new teachers may be reflected in this correlation.

3. Teachers are more satisfied and positive when they have fewer students and can provide individualized attention.

4. The more teachers are paid, the more they feel that pay increases are required to make Job Corps teachers more effective. Satisfaction and attitude are inversely correlated with salary. It may be that salaries do not progress commensurately with seniority, and this may be the cause of the less favorable attitudes of senior teachers. On the other hand, negativism may be caused by tedium and lack of change, with the negative relationship between salary and satisfaction being explained by the relationship between tenure and salary.

In summary, it can be seen from these data that, while teachers view the Basic Education and GED programs positively, they do perceive some weaknesses in them. They do believe that, while the existing programs are adequate, there are new materials which could help them do a better job. The teachers sampled in this study firmly believe that student receptiveness to the program is dependent on what teachers do and that new materials would facilitate this effort.

IV. STUDENT ATTITUDE QUESTIONNAIRE

The analysis of the Student Attitude Questionnaire was based on the tabulation of item means and the correlation between the total score on the questionnaire and the demographic information which was asked. In addition, correlations were computed utilizing relevant portions of the attitude questionnaire. The calculation of the item means provided information concerning general attitude on the specific question content. The calculation of the correlations provided information as to whether there was a relationship between attitude and specified demographic data. It was believed that, if there was a fairly strong correlation, the demographic data might be used as a predictor of attitude.

Approximately 800 corpsmembers in both contract and conservation centers were interviewed during the course of the study. The frequency distribution of the total scores for this sample may be found in table 12. The shaded portion of the graph includes all corpsmembers whose total score on the attitude questionnaire was above the midpoint of the possible score range (illustrating positive attitude). The analysis was performed on the 100 questionnaires with the highest total score and the 100 questionnaires with the lowest total score (n = 200). The general consensus is that there would be very little additional measurement error involved in using this procedure rather than total sample analysis.

The item means which were obtained from the corpsmember sample were very encouraging (table 13; regional breakdown may be found in appendix B).

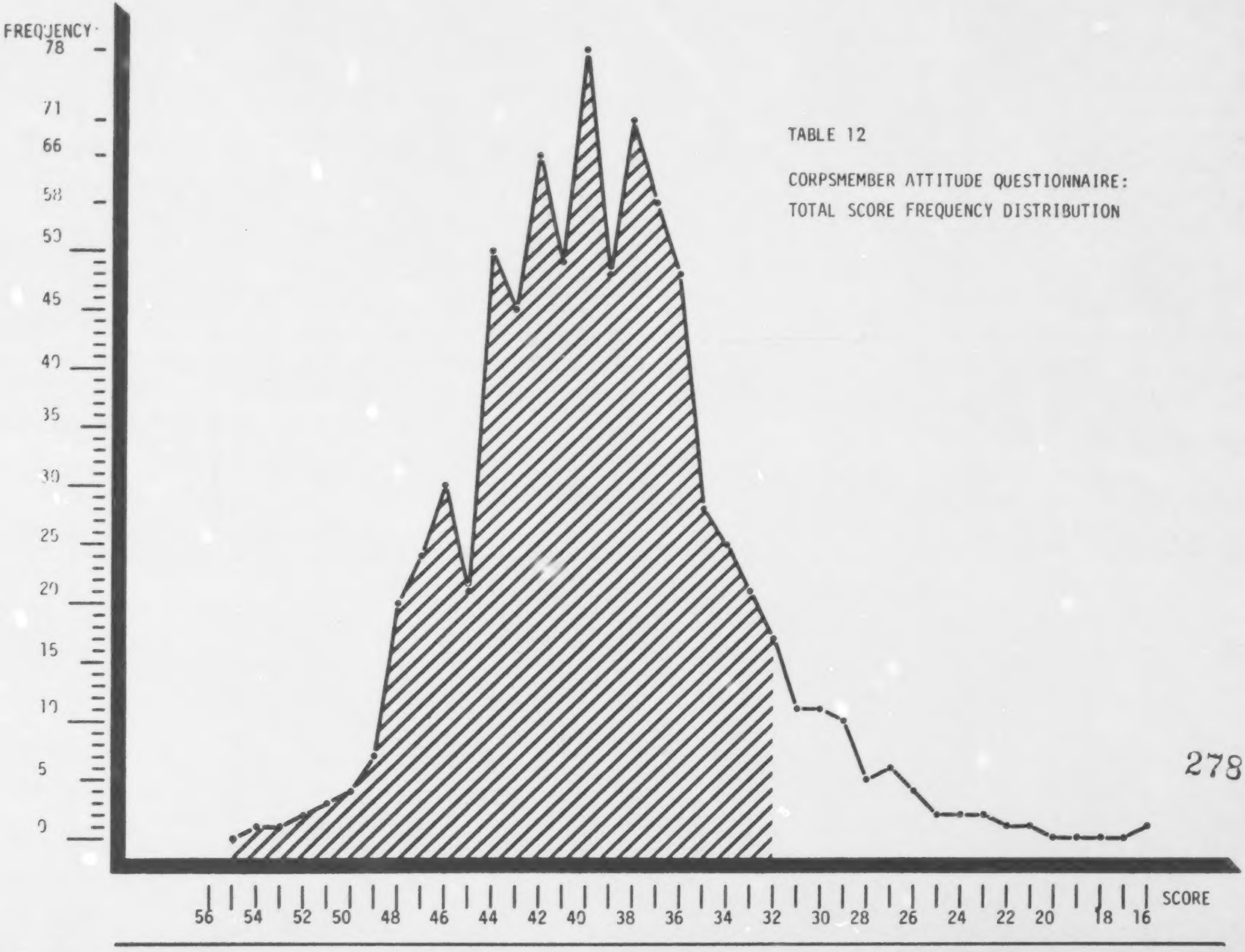

TABLE 12

CORPSMEMBER ATTITUDE QUESTIONNAIRE: TOTAL SCORE FREQUENCY DISTRIBUTION

TABLE 13

Student Attitude Questionnaire

Item Means

Item Number	Item	Item Mean
1	Job Corps is giving me a chance of an education that I couldn't get any other way.	3.56
2	The education classes here are more interesting than when I went to school back home.	3.27
3	I learn more here than I did in school.	3.59
4	I wish they would do something to make reading and math more interesting.	3.54
5	My teachers give me enough individual attention in class.	3.63
6	I am treated fairly by my basic education or GED teachers.	4.04
7	I consider my teachers as friends here.	3.97
8	My teachers respect me as a person.	4.04
9	The people who go home from Job Corps early do so because the classes are too dull.	3.67
10	The education program is nothing like what I was told it would be in my orientation.	3.13
Overall Average		3.65

The students appear to have a very positive attitude toward the Job Corps Basic Education and GED programs.

Corpsmembers feel that something should be done to make reading and mathematics more interesting. This independent assessment agrees with the belief of the teachers that, although the in-use materials are adequate, there are new materials which could be better. In addition, corpsmembers seem to feel, as evidenced by comments, that programmed instruction tends to get boring. This supports the use of supplemental learning aids.

What should be noted is that, for the sampled concepts, the Job Corps student likes what is happening. He feels that teachers are treating him fairly (item 6), that he is getting enough attention in class (item 5), that his teachers are friends (item 7), and that, above all, he is being respected as a person (item 8). Thus, in the eyes of the students, the teachers are performing far above an average level in these areas.

The Pearson Product Moment Correlation Coefficient, which was the statistic utilized for this analysis, determines the strength of association between two things. The range of the Pearson r is from -1 to +1, with 0 showing no relationship ($r=-1 < 0 <=1$). However, it should be noted that this statistic is accurate only for linear data. (Illustration: A correlation of r=+.75 between months in Job Corps and overall attitude would show that, as a person stays longer in Job Corps, attitude gets better. A correlation of -.4 between these two factors would show that, as a person stayed longer in Job Corps, attitude became more negative.) The correlations for the corpsmembers interviewed in this study are presented in table 14.

TABLE 14

Student Attitude Correlations

Correlation	Result
Months in Job Corps/total attitude score	.04
Age/total attitude score	.02
Enrollment in Basic Education or GED/total attitude score	.27
Last grade attended/total attitude score	.11
Student question 5/student:teacher ratio by center	-.58
Average yearly cost for materials/student question 4	-.28
Teacher overall satisfaction by center (questions 1-4)/ student overall satisfaction by center (questions 1-3)	.10

Several insights are suggested by these correlations:

1. These correlations reveal that there is no significant relationship between months in Job Corps and attitude or between corpsmember age and attitude. Thus, perceptions about the Job Corps do not change, at least while the student is in the program.

2. Students notice and feel they benefit from individualized attention when the number of students per teacher is reduced.

3. Students are more satisfied with materials when expenditures for materials increase.

4. In centers where teachers tend to be more satisfied and have positive attitudes, students also seem to share this positivism.

5. Youth who are in the GED program are more positive about educational offerings than those in Basic Education.

V. RECOMMENDATIONS

This information about the education program in Job Corps suggests administrative and policy measures which may be required to improve the program.

Administrative and Policy Recommendations

- Implement a consistent procedure delineating responsibility for test administration and a set time for placement test administration.
- Institute a standard program for corpsmember GED placement.
- Develop a standard procedure for maintenance of educational data in terms of who maintains it and for how long.
- Adopt a single standardized test such as the Stanford Achievement Test (SAT), the California Achievement Test (CAT), or the Sequential Tests of Educational Progress (STEP) for measuring gains in reading and math.
- Investigate the possibility of instituting GED testing at the larger Job Corps centers.
- Establish standardized qualifications for teacher aides and study the most advantageous use of aides within the Job Corps educational program.
- Implement a consistent procedure for improved placement and follow-up data in order to obtain and maintain an accurate data base.
- Standardize the Basic Education and GED programs and concommitant data-gathering procedures within feasible cost and staffing limitations.

As part of its commitment to improving all Job Corps components, an Educational Improvement Effort is planned for fiscal 1979 and fiscal 1980 which will test alternative educational systems and approaches within Job Corps centers. The information gathered in this survey provides insights into the design of the EIE.

- A staffing model should be tested utilizing a master teacher and teacher aides to determine if they can assist in lowering teacher/student ratios and in increasing educational gains.
- Since there is such variability in tests and procedures, a standardized test or test battery must be introduced for measuring educational gains to facilitate determination of comparability of gains from the same model across sites. This will enable the calculation of a model by site interaction.
- An educational model such as API should be tested in order to increase the percentage of centers able to give Carnegie units or to obtain state accreditation.
- New materials and a new GED program should be tested to accommodate the desire of teachers for new educational materials.
- Computer-assisted instruction models should be assessed to determine if supplemental hardware of this nature can increase educational gains and/or student motivation at a reasonable cost.

If these recommendations are successfully implemented and evaluated, the refinements which have been field-tested in the centers can be universally implemented to continue improvements in the Basic Education and

GED programs. Furthermore, the EIE should be only the beginning of the revitalization of the in-center programs and should be expanded to survey, test, and improve all facets of the Job Corps learning systems with a special emphasis on integrating vocational and educational programs and spreading the use of existing successful vocational materials. In this way, thousands of both present and future Job Corps enrollees could be provided with even more effective and efficient programs.

APPENDIX A

SAMPLED CENTERS

CENTERS WHERE INTERVIEWS WERE CONDUCTED

Region	Center
III	Blue Ridge
	Charleston
	Keystone
	Maryland (Woodstock)
IV	Atlanta
	Breckinridge
	Crystal Springs
	Jacobs Creek
	Lyndon Johnson
	Oconaluftee
	Schenck
	Whitney Young
V	Cincinnati
	Cleveland
	Detroit
	Golconda
VI	Cass
	El Paso
	Gary
	Guthrie
	Mc Kinney
	Ouachita
	Treasure Lake
	Tulsa
VII and VIII	Clearfield
	Collbran
	Excelsior Spring
	Kicking Horse
	Mingo
	Pine Ridge
	Weber Basin

Region	Center
IX	Phoenix
	San Jose
X	Angell
	Ft. Simcoe
	Portland
	Timber Lake
	Tongue Point

Region	Center
IX	Phoenix
	San Jose
X	Angell
	Ft. Simcoe
	Portland
	Timber Lake
	Tongue Point

APPENDIX B

ATTITUDE ITEM MEANS BY REGION

TEACHER ATTITUDE QUESTIONNAIRE

TABLE 8

Teacher Attitude Questionnaire
Item Means by Region

Item Number	Item	Item Means							
		Region 3	Region 4	Region 5	Region 6	Regions 7 & 8	Region 9	Region 10	Total
1	This center is a good place for a teacher to work.	3.63	4.00	3.61	3.86	3.53	4.10	4.25	3.85
2	This job is interesting and challenging.	4.37	4.00	4.17	4.33	4.21	4.30	4.25	4.29
3	I get enough recognition for the task I'm performing.	3.21	3.22	3.11	3.28	3.76	3.40	3.35	3.33
4	The center administration treats me fairly.	3.16	4.05	3.44	3.63	3.41	3.90	4.10	3.67
5	If Job Corps teachers were paid more, they would be more effective teachers.	2.58	2.72	1.94	2.67	2.91	2.50	3.40	2.78
6	The materials and learning system which I use are not adequate for the task.	2.58	2.83	3.11	3.23	2.69	3.10	3.25	3.03
7	There are new materials that could help me do a better job in my area.	4.00	4.33	4.39	3.74	4.09	4.10	4.55	4.14
8	I would like to be able to develop curriculum materials on my own.	4.32	4.62	4.22	4.00	4.12	4.10	3.80	4.08
9	Working with programmed instructional materials gets boring for a teacher.	2.63	2.44	3.11	2.86	2.38	3.10	3.10	2.78
10	The students would be more receptive depending on what I did.	4.21	4.39	4.44	4.12	4.47	4.10	4.35	4.30
Overall Average		3.47	3.66	3.55	3.57	3.56	3.67	3.84	3.62

APPENDIX C

ATTITUDE ITEM MEANS BY REGION

STUDENT ATTITUDE QUESTIONNAIRE

TABLE C

Student Attitude Questionnaire
Item Means by Region

Item Number	Item	Item Means							
		Region 3	Region 4	Region 5	Region 6	Regions 7 & 8	Region 9	Region 10	Total
1	Job Corps is giving me a chance of an education that I couldn't get any other way.	3.68	3.06	3.46	3.89	3.50	3.80	3.24	3.56
2	The education classes here are more interesting than when I went to school back home.	3.58	2.53	3.46	3.49	3.19	3.70	3.00	3.27
3	I learn more here than I did in school.	3.58	2.82	3.77	3.74	3.62	3.30	3.88	3.59
4	I wish they would do something to make reading and math more interesting.	3.26	3.85	3.46	3.66	3.33	3.50	3.59	3.54
5	My teachers give me enough individual attention in class.	3.53	3.29	3.85	3.72	3.76	3.90	3.41	3.63
6	I am treated fairly by my Basic Education or GED teachers.	4.26	3.79	4.15	4.02	4.07	4.10	4.12	4.04
7	I consider my teachers as friends here.	4.00	3.68	3.85	4.09	4.21	4.00	3.59	3.97
8	My teachers respect me as a person.	4.16	3.91	4.31	4.17	3.93	4.10	3.71	4.04
9	The people who go home from Job Corps early do so because the classes are too dull.	3.89	3.26	3.69	3.85	3.74	3.50	3.41	3.67
10	The education program is nothing like what I was told it would be in my orientation.	3.32	2.56	3.31	3.36	3.26	3.30	3.10	3.13
Overall Average		3.73	3.28	3.73	3.80	3.66	3.77	3.51	3.65

A SUMMARY OF LITERATURE ON EDUCATION IN JOB CORPS

Dannielle Shultz

The following is a summary of significant elements of the Job Corps Basic Education Program as described in various Job Corps reports. It cannot be emphasized too strongly that statements which appear within are not necessarily those of the author, but a synthesis of the opinions and research of the referenced studies going back at least ten years. Given the normal questions as to the reliability and validity of these studies, any conclusions should be considered sceptically and the study consulted for a closer look at the specific data. This paper only attempts to summarize the research and its stated conclusions.

Entry Levels/Gains Data

Corpsmembers enter at very low levels of actual educational attainment, despite having completed many more years of school than their attainment scores reflect. According to an ABT study based on Job Corps data, 66% of corpsmembers in 1969 had reading levels below sixth grade and 64% had similar math levels, while 1971 the corresponding figures were 69% and 76%.

Therefore, between two-thirds and three-quarters of Job Corps entrants have reading and math skills below the level necessary for the GED. Also, the study showed that virtually no corpsmembers (only 3% - 7%) have high school level skills.

Most corpsmembers show some gain during their Job Corps stay. In general, the lower the beginning level, the greater the gain. However, some studies indicate that this may be due more to remembering what had been forgotten rather than assimilation of totally new material. While nearly 80% of corpsmembers in the introductory (below third grade) program show gains, 66% of those in the elementary program (third to sixth grades) show gains, and this is further reduced to about one half of corpsmembers showing gains in the intermediate (seventh and eighth grades) program. And not only were fewer making gains, but those that did were gaining at a progressively slower rate.

About three quarters of all Job Corps participants have completed formal schooling only through tenth grade and those that stay in Job Corps the longest have completed the least amount of schooling. This would indicate that those who need the program most (or know they have the fewest "outside" opportunities) opt for the longest stay. However, another study (Engleman, 1971) found that the educational level associated with longest length of stay was 6.3 grade levels on entry, perhaps indicating frustration at one end and boredom at the other.

Actual rate given has been reported to be about fifth grade level/four months for both reading and math (with as many losses as gains in math) for the five best Conservation Centers (1967), as measured by the S.A.T.

This study (A&R Reports No. 5) chose the S.A.T. because it claimed the population of standardization was similar to Job Corps, the contents paralleled Job Corps programs, and data was reported in public school grade levels.*

Engleman (1971) is sceptical of these claims, and in his re-analysis of the same data, he found average gain to be .69 grade levels/4.8 months (reading) and .70 (math); however, this rate was achieved by those at a 6.1 entry grade level. Also, the higher the entry level, the lower the rate of gain, and there was no significant difference between centers.

Math gains were more precisely correlated with length of stay than were reading gains; Engleman believes that vocational education classes act more as reinforcers and refreshers for math rather than reading skills.

In general, while Job Corps participants' gains did not meet or exceed public school norms, they probably exceeded gains the corpsmembers themselves had actually achieved in the public schools.

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* In a separate study (Morgan Press, Inc.), the GATB was also found invalid for corpsmembers.

It is frequently cautioned that the gains testing of Job Corps is highly suspect in testing procedures,and validity and reliability of both tests used and scores reported. There have been wide fluctuations in gains reported, from the above mentioned to as much as .5/month. Thus, this data is highly suspect.

GED Certificate

Even using the above data as a starting point, we can conclude that, given the average length of stay, a large percentage of corpsmembers will not be able to achieve a high enough grade level (variously described as sixth or seventh grade) to pass the GED.

It is difficult to determine from the literature just what percentage of corpsmembers actually earn the GED, but at least one study suggests that 11% of enrollees and 40% of those staying beyond four months (average stay is about four to five months) gain a GED. Another study claims that only about one fourth of Job Corps participants complete the Basic Education Program.

As of September 1978, approximately 10% of enrollees were passing the GED and 30% of enrollees at least entered the program. Of those taking the test, nine out of ten passed it and received a GED certificate. The higher the entry level (naturally) the greater the chance of earning the GED.

According to several studies, earning a GED is probably the most valuable benefit to be derived from Job Corps. While studies frequently mention that the vocational education segment is the most popular area with corpsmembers, employers tend to regard Job Corps experience or vocational training as insufficient experience for the actual trade. Project Thresholds's (an experimental New York City halfway house) experience with corpsmen and employers showed that:

> a high school diploma or GED is the best job preparation the Corpsmen can have.

because:

> Significantly more Corpsmen who had acquired GED's (High School Equivalency) retained their jobs longer as opposed to those who had no GED. The same relationship existed between pre-Job Corps high school graduates and those without GED's.

and finally,

> The diploma or GED shortened the time necessary to secure employment and usually assisted the Corpsmen in finding work that was directly related to his vocational goals and interests.

Ironically, then, that which is perceived by corpsmembers as less job related turns out to be most job related.

If the GED or a diploma is therefore so crucial, then what does the research suggest are the factors leading to interest in and success in the Basic Education Program?

Satisfaction and Attainment in Basic Education

There are several important factors contributing to how satisfied the corpsmember is with the education program and how much gain he or she attains while in the program. Besides length of stay and level at entry (as discussed above) the research suggests the following:

1. Correspondence Between Corpsmembers's Pre-entry Expectations and Their Perception of Job Corps Actuality. The closer the fit, the more satisfied the corpsmember. The most recent study (Mathematica, 1978) suggested that the education program (along with job training) is most likely to be rated positively among the various segments of Job Corps, and that it closely fits their previous expectations. However, females, blacks, and older enrollees are more likely to rate the education program positively. Another study (Abt, 1973) confirmed this in about 80 percent of its sample.

2. Alternation of Scheduling. Studies have found that alternating basic education with vocational training makes for higher corpsmember satisfaction and better retention. The vast majority of enrollees view Job Corps as a job program rather than an academic program (which is in fact accurate) and higher satisfaction and greater correspondence with expectations (as above) is achieved if all corpsmembers' programs include vocational education. Indeed, in a few Conservation Centers where daily

alternation was impossible due to the distance to work sites, this was felt to be a major cause of lower retention for those sites.

The main difficulty with alternating the two segments appears to be that vocational education presupposes competence in basic skills which corpsmembers may only just be acquiring. Thus, there is a need either to find materials and structure experiences to match corpsmember levels, and/or to incorporate vocational content into the Basic Education Program. However, the first approach may further minimize the work experience value of vocational education, since the program may be so simplified that the experience does not correspond to actual work. The second approach may alienate corpsmembers who want work experience, not more formal schooling.

If basic education courses are not specifically vocational in content, then the studies indicate that there should be "positioning of general education courses in terms of their relationship to economic self-sufficiency, e.g., the job itself, money management, career path, etc."

3. Feedback/Time Completion. Yankelovich found that corpsmembers have a strong need for time-limited completions and quick feedback. In other words, corpsmembers need to be able to measure progress through unit-completion type programs, have a clear sense that they are at a certain level, and have finished and "put away" previous levels. Also, Yankelovich suggests that corpsmembers be given a prediction of just how long they need to stay in Job Corps to complete their stated goals, since

those who feel it "could go on forever" are likely to give up due to lack of any sight of goal attainment.

4. Remedial or Compensatory Education. According to work at the Omaha Job Corps Center, remedial reading programs were found effective only with those at a 4.9 reading level or below. Other studies suggest stigma attached to being pulled out of the classroom or regular programs, or assigned to a special program for the very lowest levels, so such remediation should probably take place within the normal setting.

5. Incentives. The evidence for gains related to incentives is uncertain, but generally is unfavorable. In a study at the L.A. Job Corps Center, a $5 award was offered to counteract hypothesized apathy or antipathy to gains testing -- if a gain was shown over the previous score, the award was made. There was no significant difference between the groups.

In experiments with points and token economy systems, the administrative "bookkeeping" requirements were found to be too complex and too time consuming, and to generate too many arguments and attempts to "beat the system" on the part of corpsmembers.

6. Teacher/Student Interaction. This is divided into two parts. The first part includes such factors as actual amount of time spent in the classroom and particularly, how much of that time is spent in genuine teacher-student interchange: how often each talks to each other as opposed

to a passive: active/student: teacher relationship and how many non-verbal cues the teacher gives the student to indicate attention and response.

Besides frequency and vitality of interaction, teacher attitude is a significant affector of student performance. Communicated concern, high expectations coupled with high confidence in students, and, in general, old-fashioned love and concern have a profound effect on student achievement. Many studies rate this as the most important determinant. This argues for programs with a high degree of teacher-student interchange as opposed to self-instruction.

II. Summary

Basically, the bulk of the research concludes that most corpsmembers enter Job Corps at a very low educational level and make some gains, though usually not enough to earn a GED. Programs should have materials which are geared in subject to adults and which are perceived as directly relevant in content to employment and, particularly, vocational skills. However, while materials are an important area of concern for corpsmembers, corpsmember-teacher interaction is the most significant determinant of actual gains.

Receipt of the GED certificate shortens the time necessary to find a job, makes it more likely that the corpsmember will find one close to his or her interests, and increases the corpsmembers' retention in a job. There is indication that a GED is the single best job preparation a corpsmember can have. However, the majority of corpsmembers enter at too low a reading/math level and/or stay too short a time to achieve the level necessary for the GED.

It has been found that scheduling close alternation of the academic and work experience segments leads to better retention in the program. However, corpsmembers prefer the experience and job training to basic education, and the vocational education is much more a break from the academic rather than vice versa.

Corpsmembers appear to view the purpose of Job Corps as job skills training and tend to object to segments which are reminiscent of their (frequently detested) experiences with formal education.

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Plans and Programs Directorate "Job Corps Evaluation and Research: Fiscal Years 1967-1968" June, 1969

JOB CORPS WORLD OF WORK CURRICULUM
NEEDS ASSESSMENT
AND
RECOMMENDATIONS FOR
CURRICULUM MODIFICATION

Jane L. Melton
Joseph Wrobel

Office of Youth Programs
Report Number 13
February 1979

OVERVIEW

The World-of-Work program was instituted in Job Corps centers in 1975. Its purpose is to provide corpsmembers with the job seeking and job holding skills, information and attitudes which help them succeed in the labor market. The program supplements more extensive education and vocational training offerings at centers.

Evidence is clear-cut that entering corpsmembers lack many of the skills needed for success in the labor market. While the employment and earnings gains of enrollees are proof of improvements in employability, it is difficult to isolate the separate impacts of vocational training, education credentials attained, placement activities, and improved job seeking and job holding skills or attitudes which can be attributed to WOW.

A study of the noneconomic impacts of Job Corps does not provide evidence of improvements in knowledge of attitudes toward or interest in work. A test to measure skills needed in looking and applying for work found that both completers and dropouts gained less over the period of enrollment than a control group which
Experience in the labor market proved more useful than classroom instruction in jobseeking skills. Test to measure awareness of employer expecting to assess understanding of different job content and another to measure confidence in job skills, revealed, again, that Job Corps enrollees lost some ground relative to controls. Job Corps completers did better than controls on tests measuring work relevant attitudes, work ethics, subsequent job satisfaction, and positiveness about the future. In other words, it appears that Job Corps has a greater effect on maturing youth for labor market preparation than in providing knowledge about how to find or hold jobs or what to expect in the worksite.

Firsthand experience in the labor market may be the best teacher, and the potential and actual contribution of the World-of-Work program is essentially untested.

This report combines a brief description of the World-of-Work program currently inplace, recommendations for possible curriculum modification resulting from a conference of World-of-Work instructional experts, and a survey of available materials. It suggests that the core program is quite modest, amounting to a total of between 40 and 60 hours of instruction. In the core program there are no graded standards or specific tested skills that must be mastered; most observers feels that this undermines the seriousness of student commitment. Other materials are commercially available which could usefully supplement the core program and some centers already use these supplements.

It remains uncertain, however, how any program will function in the Job Corps setting and expend as required. Also, the emphasis to be given to Work-of-Work versus more broadly defined life skills, and to either of these relative to basic educational or vocational training, has not been determined. More information and testing is required before policy decisions can be made.

Robert Taggart
Administrator
Office of Youth Programs

CURRENT IMPLEMENTATION OF
THE JOB CORPS WORLD OF WORK PROGRAM

Introduction

The current Job Corps World of Work program is being implemented in a variety of ways at different centers. This brief report includes a partial description of materials (audio-visual and print) which are currently used in Job Corps centers, a short outline of current course structure, and recommendations for steps to be taken during program review and revision.

Implementation of the World of Work program is uneven for two reasons: (1) the lack of written objectives, and (2) the plethora of supplemental materials of different quality.

The employability portion of the program is designed to teach corpsmembers skills necessary to get and keep a job, but there is no formal statement containing behavioral learning objectives that specifies these skills so that meaningful evaluation can take place. Some centers have rewritten their own course curriculum. We are compiling this information now, in the hope that we will have time allotted to set forth a comprehensive list of objectives and to devise an evaluation instrument for the World of Work program. (Most of the centers have not developed lists of behavioral objectives.)

Employability Curriculum Variations

The program, as it is currently implemented, consists of the EDI, Inc., audiotapes and workbooks. Many centers have supplemented these with numerous commercial materials. We will attempt to describe in this report the major supplemental materials in use. We cannot provide a total listing without contacting each center. For example, Cass Job Corps center has done an excellent job of identifying and utilizing a wide variety of materials in its program (see attachment 3). Cass is already using some of the Janus workbooks and simulation activities which we have recommended for widespread use, in addition to using audio materials from Mafex Associates, Inc., Eye Gate House, Guidance Associates, and other companies. (For a description of the types of materials mentioned, see attachment I.)

Charleston Job Corps center is relying on the PET (Pre-Employment Training) series by Innovative Sciences, Inc., in a tape and workbook format. Potomac Job Corps has received a lot of free material from the federal agencies surrounding it. Some Singer centers, such as Westover, are using the "Job Survival Kit," a filmstrip series which they have developed.

The Hawaii Job Corps center seems to have a program most similar to that of the Adkins Employability Skills program in that the instructer uses the videotape recorder to provide students with feedback on simulation activities; the students perform research to obtain information about various jobs, including information interviewing and reading about the job, and community resources are utilized in order to provide students with a realistic assessment of the job. Moreover, seven of the conservation centers are using the 3M Contempo Lab program described in the conference report.

Some centers have developed their own course curricula. For example, the Charleston Job Corps center conducts two week mini-units on consumer topics such as money management, food, parenting, and so on. These units are workbooks which include written tasks to be performed for completion. In the employability portion of the program, the EDI and Innovative Sciences, Inc., workbooks are used.

At the Pittsburgh Job Corps Center, the instructor has developed a series of workbooks, each containing a unit of study. The student has tasks to perform (i.e., listening to an EDI tape and completing a question/answer form, filling in vocabulary lists, and so on) in order to complete the unit. We would urge the continuation of creative efforts of this kind; this type of work can be incorporated into a revised program.

Course Structure

Those centers which are using supplemental materials and devising their own materials have typically structured their course as follows: The instructor has approximately 18 to 20 students per class. The intake is approximately seven to ten students per week. The courses usually run from eight to sixteen weeks, depending on the rate at which the student covers the material.

Some centers offer a mix of individual and group instruction. For example, three days a week, students perform workbook exercises; two days a week are devoted to group discussion.

Those centers which rely mainly on the EDI materials usually run a much shorter program. Some centers offer students 5 to 7 days of instruction, one day per week for 5 to 7 weeks. The main activity is listening and responding to tapes, with group discussion interspersed. In summary, some centers are using one or two sets of commercial materials, in addition to any free sources which can be obtained. Some centers are using only the EDI materials, and a few centers have written an entire curriculum including individual workbooks developed by the instructor which list a variety of tasks the students must perform to complete the course. All centers have expressed the need for more useful, relevant, and effective materials.

Recommendations

The World of Work conference provided instructors with a variety of sources of curricula and information, so that centers which have only been using one set of commercial materials can investigate other options. The conference also pointed out the need for a more unified program in which those goals stated in the conference reports are adequately addressed. In order to ensure that any program revision encompasses these goals, we need to perform the following:

- Develop a list of behavioral learning objectives for the World of Work course. This could best be accomplished by a small task force of teachers and consultants. Many instructors at centers do not have lists of behavioral objectives available for our review at the present time. The Adkins model and the 3M Contempo Lab model do have written performance objectives which would help us in developing the list.

- Develop an evaluation instrument to measure the learning that has taken place in the World of Work program.
- Develop revised program guidelines in keeping with the list of goals and objectives. These guidelines could be incorporated into a new program manual. They would include suggested course content and methods. These guidelines are needed to help provide direction for strengthening and revising the program so that we can expand the role of the student and to move the corpsmember from a relatively passive learning situation to one requiring more student involvement.

We recommend that these steps be taken if program revision is to occur.

ATTACHMENT 1

PARTIAL LISTING OF SUPPLEMENTAL PRINT AND AUDIOVISUAL MATERIALS USED IN THE WORLD OF WORK PROGRAM

- Eye Gate House
  146-01 Archer Avenue
  Jamaica, New York 11435

  FORMAT: Filmstrips, cassettes, and review questions.

  CONTENT: The job interview and application process; consumer topics; labor unions

A few centers are using this material. It is useful for corpsmembers on a low reading level. Although some minorities are depicted, the presentation is more geared toward the middle class.

- Innovative Sciences, Inc.
  300 Broad Street
  Stamford, Connecticut 06901

  FORMAT: Workbooks with fill-in-the blank questions and quiz/activity sheets; cassette tapes

  CONTENT: Finding and keeping a job; job attitudes

This material is in use at one or two centers. Reading level is approximately sixth grade. Fill-in-the blank material needs to be reinforced by other instructional methods. Useful for corpsmembers who do not have reading difficulty.

- Guidance Associates
  757 Third Avenue
  New York, New York 10017

  FORMAT: Filmstrips with either records or audio cassettes

  CONTENT: Getting and keeping a job, including the job interview and applying for the job; consumer topics

This material contains no method of evaluating what the student has absorbed. It should only be used for the purpose of introduction or review. Many centers are using these materials.

- Mafex Associates, Inc.
  90 Cherry Street
  Box 519
  Johnstown, PA 15907

  FORMAT: Textbooks, some of which contain duplicating masters.

  CONTENT: Completion of application forms (for the job, for bank loans, for credit cards).

Most of this material is on a low reading level (4th grade and below) and would be useful for corpsmembers with reading problems. Only one center was known to be using this material at the time of the conference.

- Singer Job Survival Kit

  FORMAT: Filmstrips and audio cassettes, student workbooks

  CONTENT: Finding, getting, and keeping a job

This material is more suitable for students on a sixth grade level or above. Some Singer centers are making use of this material.

- Media Materials, Inc.
  2936 Remington Avenue
  Baltimore, Maryland 21211

  FORMAT: Student workbooks and illustrations

  CONTENT: Job orientation materials obtaining information and understanding terminology

These materials are useful for the pre-reader and the beginning reader. At the time of the conference, only one center was known to be using these materials.

- Educator's Guide to Free Films
  Educator's Progress Service, Inc.
  Randolph, Wisconsin 53956

This book lists many films in career education. The instructor may request a film and use it for a temporary time period, with the only cost being that of return postage. The films may also be purchased. Few people at the conference were using this resource.

JOB CORPS WORLD OF WORK CURRICULUM NEEDS ASSESSMENT AND RECOMMENDATIONS FOR CURRICULUM MODIFICATION

I. GENERAL PROGRAM GOALS AND RECOMMENDATIONS

From December 12 to December 14, 1978, the national office of Job Corps hosted a conference for experienced World of Work (WOW) instructors from selected Job Corps centers. This conference as facilitated by TEAM Associates, Inc., was designed to enable the participants to review the existing WOW curriculum, assess the need for program revision, and make specific recommendations for curriculum modification. The proceedings of that conference are described in greater detail in a separate report. This introduction will summarize the findings and recommendations of that conference, as they indicate the possible directions for WOW curriculum development.

These findings and recommendations are as follows:

A. The WOW program should not only be concerned with the development of skills, but also with the development of the values, attitudes, and abilities which underlie "employability." Employability may generally be defined as being able to find, get, and keep a job. It requires an accurate and realistic knowledge of the expectations of potential employers, a willingness to meet those expectations, and the skills and abilities needed to do so. These are complex goals, requiring changes in awareness, understanding, knowledge, and behavior. The objectives of the program should address this complexity, and the curriculum should provide instruction in all of these areas in a single comprehensive design.

The program should be practical, in that the corpsmembers should be able to apply their learning to any work situation and to generalize it to new situations. It should emphasize the activity of the individual corpsmember and require each corpsmember to actually perform the activities intended to demonstrate the desired learning.

The program should be realistic, in that it helps the corpsmember to develop accurate perceptions of the world of work and of the skills and abilities needed to survive in it. In general, the needs of "employability" are far more complex than is recognized by the existing programs, and the program should be changed as needed.

B. The program should be designed to assist each corpsmember in developing a specific plan for personal and career development. Each corpsmember should develop such a plan, which would include defining one's personal goals, assessing one's strengths and previous experiences in relation to these goals, determining the additional resources needed to achieve them, defining alternative strategies and selecting the most appropriate ones, and revising the original plan in response to the learning gained from acting to carry out the plan. No corpsmember should complete a Job Corps program without learning these essential skills.

C. The WOW program should have a more significant role in the total center program, equal to the Basic Education and Vocational Training programs. At present, these programs are designed primarily to teach skills; the development of appropriate values and attitudes is a secondary program objective in both of these areas, but no instructional mechanism for such learning is now built into these programs. Neither are these programs designed to teach transferable skills in goal-setting, planning, and decision-making which can be used in any work situation. The WOW program should address these areas primarily, and in that way provide a third fundamental base for the entire center program. Therefore, the WOW program should be an ongoing part of a corpsmember's program, throughout the entire stay at the center.

D. The WOW program should be integrated with other program areas such as orientation, basic education, vocational training, counseling, residential living, and placement. The personal and career development plan developed by an individual corpsmember in the WOW program could be a reference point for staff decisions in each of these program areas. Plans made in WOW could be complemented by specific skills instruction and vocational and personal counseling in other areas, and resource materials drawn from these areas could be used in WOW.

E. The program should provide opportunities for social interaction which would be a basis for evaluating learning and functional competency. The program should include many more activities requiring group work, and the group should assist each individual in personal and career development. The present Basic Education and Vocational Training programs emphasize individualized instruction; this often results in the isolation of each individual in the learning environment. This could be one reason for the high turnover of corpsmembers in their first thirty days at the center.

The WOW program could attack this problem by providing a strong support group which meets on a regular basis to assist each individual in defining, sharing, and working toward goals and in providing affirmation and support in a structured setting. Presently this kind of support is developed primarily through the residential living program, but this program does not provide specific instruction in the relevant skills.

II. NEEDS ASSESSMENT

Participants at the conference discussed the strengths and weaknesses of the current program and identified major areas of concern. The conference group conclusions reinforce the inferences made in the "Evaluation Study of Job Corps World of Work Curriculum," a paper submitted to the National Office of Job Corps by TEAM Associates, Inc., on October 12, 1978.

Following is a further description of areas of concern shared by conference participants. All of the items indicate a need for program revision. Any modification should follow the guidelines set forth at the beginning of this report.

Need for Expanded World of Work Model

The present World of Work curriculum is run on audiotapes. At the completion of each tape, the student answers workbook questions. Some group discussion may follow. As the current course is designed, there is no definitive application phase, during which students are required to demonstrate competency in each specific area. Some instructors, having seen the crucial importance of this stage in the learning process, have built in this phase using a variety of materials and techniques.

However, under the current structure, the student is a relatively passive learner. We need to move from thinking of the World of Work course as a curriculum which can be taught and learned at a desk, to the concept of a much broader based program in which the student's role is expanded from that of a passive receiver to an active explorer and learner. Students need more contact with the actual world of work. The program and the learning can no longer be confined to the limits of the classroom. In summary, at present, many corpsmembers find the program "dull and boring" in the terms of conference participants. A mechanistic program of audiotapes is imposed on the students; and corpsmembers receive very little reinforcement from instructors or other students. At some centers, the course is extremely short. If the program is designed to induce behavioral change and skill development, time needs to be allotted to ensure that the objectives are met.

Need for Performance Standards

Finally, and perhaps most importantly, at present there is no written standard of assessment stating what corpsmembers should be able to do as a result of the learning; instructors have made arbitrary decisions regarding performance standards. Some objective setting was done at the conference; however, as was recommended in the "Evaluation Study of Job Corps World of Work Curriculum," a task force needs to be chosen to determine performance objectives for this course so that the program can be adequately evaluated.

In summary, the conference participants felt that WOW could fill a primary need that is not adequately addressed now in the Job Corps program--the need to provide a structural instructional program in which corpsmembers could learn and practice the intellectual and social skills and abilities to become "employable." This would include developing a personal plan for career development and a strongly supportive social context in which to test it. It would provide a focus and direction for the total center program which is presently lacking.

The existing WOW program cannot meet these needs. It is a relatively short-term instructional program with limited content and goals, in which the student's participation is mostly passive and performance is measured by pencil-and-paper tests. Individual centers have developed supplementary WOW instruction which is often excellent, but Job Corps has not provided a comprehensive program model aimed at the goals described above.

III. SUMMARY

In summary, the conference participants felt that the World of Work could fill a primary need that is not adequately addressed in the Job Corps program at present--the need to provide a structural instructional program in which corpsmembers could learn and practice the intellectual and social skills and abilities to become "employable." This would include developing a personal plan for career development and a strongly supportive social context in which to test it. It would provide a focus and direction for the total center program which is presently lacking.

The existing World of Work program cannot meet these needs. It is a relatively short-term instructional program with limited content and goals, in which the student's participation is mostly passive and performance is measured by pencil-and-paper tests. Individual centers have developed supplementary World of Work instruction which is often excellent, but Job Corps has not provided a comprehensive program model aimed at the goals described above.

RECOMMENDATIONS FOR CURRICULUM MODIFICATION

TEAM Associates, Inc., was contracted by the National Office of Job Corps, Employment and Training Administration, Department of Labor, to conduct a search and evaluation of curricula which would be suitable for use in the World of Work Program. As a result of the review, TEAM Associates will recommend certain programs for pilot-testing at selected Job Corps centers. The present World of Work curriculum is relatively new; it was instituted in Job Corps in 1975. Its general goal is to help prepare corpsmembers to enter the labor market and to remain gainfully employed, productive citizens. The course currently focuses on skills and attitudes which the corpsmember needs to develop in order to function as a worker. As with any program, revisions and updates are necessary. Much new material in the "World of Work" area has been published in the last three years. This study was undertaken in order to keep abreast of new developments and to choose the most effective curricula for use in the Job Corps Program. Several programs were reviewed in detail; it is hoped that highly recommended programs will be pilot-tested for possible inclusion into the course and that, in the interim, further study will be performed on the structure of the course itself in order to ensure that students are provided with the best possible educational experience.

RESEARCH METHODOLOGY

TEAM Associates followed four basic procedures in conducting the search and review of World of Work curricula. First, TEAM Associates performed a needs assessment which helped identify problem areas in the current program. This part of the research was carried out by talking with Job Corps center World of Work instructors and with Job Corps consultants. The preliminary diagnostic information provided a basis for the next step in the research, establishing criteria for materials evaluation. TEAM Associates adapted an instructional materials evaluation form for disadvantaged students developed by the University of Maryland Vocational Curriculum Research and Development Center. This form contains pertinent criteria as established during the needs assessment. The following general criteria provide guidelines for choosing program materials and are major concerns addressed in this review of curricula:

1. Material Format
   - o Does the material have a stated purpose?
   - o Is the purpose relevant to the World of Work course?
   - o Is the material suitable for individual instruction?
   - o Does the material contain performance objectives and criterion-referenced measures so that program evaluation is built into the system?

FINDINGS AND RECOMMENDATIONS

As a result of an examination of the present program, TEAM Associates found ample evidence to support the concept of the World of Work Program. The planning and implementation phases of this program, however require further examination and modification. More specifically, the areas of concern are as follows: (1) the lack of clear performance objectives and criterion-referenced measures (tasks which the student performs to demonstrate his degree of competency) and (2) the lack of follow-up and reinforcement of learning.

First, the essence of the World of Work Program, as it exists now, is to aid the corpsmember in developing skills, attitudes, and behaviors which will enable him to get and keep a job and to function as a productive member of society. One focus of the program is on the job search and the other is on consumer skills. In both of these areas, present World of Work materials, in addition to many materials reviewed, are consistently lacking in written performance objectives and criterion-referenced measures. For example, in the present consumer education series, students may choose any two tapes from each section and complete the course. The following questions arise when evaluating the World of Work materials, and these certainly must be addressed prior to the development of a comprehensive, well-integrated program. Is there not a core of knowledge which Job Corps students should have upon completion of the World of Work course? Should not this core of knowledge and skills be spelled out in clearly defined objectives, with activities designed to meet those objectives? These questions further emphasize the responsibility of Job Corps program developers to determine: (1) what students need to learn, and (2) how this learning will be measured. Materials selection should not occur before these critical steps, but afterwards. Within the present World of Work curriculum, there are few written behavioral objectives. This is possibly due to the fact that the program is individualized. The single student cannot demonstrate on his own that he can handle questions posed during a job interview, for example. Thus, at present, a typical student listens to tapes on such a topic and perhaps participates in a group discussion.

This situation brings us to our second concern: the lack of reinforcement and evaluation measures of the learning. A World of Work curriculum requires a great deal of actual "hands-on" application to assure that new skills are reinforced and maintained. Instructors must be highly creative and resourceful in their presentation of World of Work subject matter.

At present, little evaluation is being carried out because of the lack of measurable objectives and lack of reinforcement techniques. If students sense that they do not have to be responsible for what they have listened to or read or seen, the learning process will lack both learner and instructor accountability. Too, when students enter the World of Work course, much of what they learn will not be applied immediately. Unless students actively use this knowledge, much of it is forgotten. For example, a student can complete a workbook on buying a used car, but it is questionable as to how much knowledge has been retained six weeks or three months later. To reinforce classroom instruction, the student could visit a used car lot, putting into practice what he has learned to look for. In other words, World of Work students must have some type of built-in reinforcement to the classroom learning process. This reinforcement may be a written or oral activity or a simulation; in any case, it should be designed to measure what the student has learned. World of Work students must be given a chance to practice skills and behaviors they have learned, just as they do in vocational courses. Much of the present course is presented through audio-visual materials. The important consideration which should be taken into account when using cassettes and/or filmstrips concerns the type of follow-up treatment the individual receives. Follow-up after an audio-visual presentation is critical to the learning process. In too many instances in programs that are mainly audio-visual in nature, there is no structured process of reinforcement.

During a follow-up, the student should be asked to demonstrate, in some manner, knowledge of the content. This can be accomplished in one of several ways. If the student can read and write comfortably on a fourth to fifth grade level, a written "fill-in-the-blank" follow-up might be appropriate for skills requiring writing, for example, the completion of an application form. If the student cannot read on a basic level, tapes which assess comprehension can be used. Blank tapes on which students record their responses would be a possibility. A small group discussion or a conference with the instructor at which specific knowledge is demonstrated would be appropriate. One of the most effective teaching/learning strategies for this content area may well be simulation. The opportunity to experience a job interview in a protected environment and to receive a critique from which to learn and refine those skills can be invaluable. Selected employers could be brought in to participate in and/or critique the simulations. Simulations could also be performed in other content areas, such as maintaining a job.

The teacher, then, must function not only as a monitor, seeing that assignments have been covered, but also as planner and designer of meaningful realistic experiences and contacts which bring students closer to the world of their future employers. Corpsmember aides might be used to monitor individual progress and to help with the more routine tasks, so that the instructor is free to do more planning for each student.

But more than this, the instructor must have specific guidelines on what skills and behaviors the corpsmember should exhibit as a result of the learning process. Once these guidelines are established, teachers and consultants can formulate tasks which must be completed at a given level to show satisfactory performance.

New materials chosen for the World of Work Program should be contingent upon the further structuring and redefining of the content of this course. However, materials have been reviewed and those which meet the general criteria are included in this summation. Following is a general description of some available programs we would recommend for use with Job Corps students. It must be stressed that this is not an exhaustive listing; it is a preliminary list of materials that would be suitable for the corpsmember population.

Curriculum Materials

Janus Publishers produces some excellent low reading level/high interest material which should be considered for pilot-testing (see evaluations in appendix A). These materials concerning the job search and certain "survival skills" were specifically designed for students with learning problems. The readability level of these materials averages to the 2.5 level on the Spache scale. At the same time, the curricula is written to to appeal to adolescents and young adults; it is presented in a clear and direct yet simple manner. The illustrations and photographs are well done;

they are up-to-date, include many minorities, and show many young people "on the job." The illustrations also relate closely to the text. In addition, the material would be suitable for individualized instruction, even for students with very poor reading skills. At the same time, it provides a basis from which teachers can improvise and design supplemental activities including field trips, demonstrations, simulations, and selected guest employers who could provide critiques. The curriculum includes simple and effective material on goal setting and decision-making, the job application and interview process, appropriate and inappropriate behaviors and attitudes on the job, in addition to survival skills which are job related: reading schedules and signs, buying a used car, and using the want ads. All of this material could be used by corpsmembers.

One drawback of this set, like others, is that specific performance objectives have not been identified. It is true that the materials must be modified to suit the system. But the lack of sequential objectives points out the need for instructors and consultants to identify measureable objectives and devise evaluation procedures to ensure teacher and student accountability. The Janus materials do contain activities and question and answer sections in the booklets which can be used as evaluation measures. It is highly recommended that measures which rely on student follow-up activity be included as a basic part of World of Work training, as a supplement and reinforcement to fill-in-the-blank questions.

Some of these activities are suggested in the teacher's guide of the Janus materials, but instructors must utilize resources creatively and must keep the objective clearly in mind in order to devise evaluation measures for student activities.

In addition, the Follett Publishing Company has published a "coping skills" consumer education series which focuses on the knowledge and skills necessary to cope with daily life in our society. The series consists of workbooks designed for slow learners. Follett has organized its texts based on research from the Adult Performance Level Study performed through the University of Texas. The research team identified the basic areas of knowledge and the skills needed to function in modern society. Follett has developed a series of workbooks designed to provide the slow students with some of these skills. The workbooks are well structured. Each lesson includes important vocabulary items for that topic and fact/comprehension questions at the end. These books might be more useful in the reading portion of the Basic Education Program. Illustrations are limited. An audio-visual approach to this material, combined with other written supplements, would probably work better.

Too, Fearon Publishers has designed a series which could be of use in a World of Work and/or Occupational Exploration Program. The "Job Box" contains 70 short booklets which describe a wide variety of entry-level jobs. Each has a worksheet that reinforces comprehension and helps the student decide on his interest in the particular area. Also, Pacemaker has just begun a "Vocational Readers" Program, a series of ten books designed to familiarize very slow learners with occupational choices. These could be used with the slower corpsmembers; they would probably be more applicable as a supplement to the Basic Education Reading Program and should be considered for use in that program.

In addition, the Singer Education Division has developed several career guidance and survival skills programs which are in use at Singer-operated Job Corps centers. These programs were not available for review and evaluation by TEAM Associates, although descriptive brochures were obtained.

Singer has a multi-media "Job Survival Skills" Program to train students in appropriate job-related behaviors. The program is advertised as a 25-hour course structured in terms of definable objectives. Singer has also developed an outstanding "Vocational Evaluation System" that assesses student ability and provides an occupational exploration experience for the student. The system simulates a work setting and contains student activities that can be measured and evaluated against standardized norms. Most Job Corps contractors are aware of this program as it exists now.

In summary, there are many materials on the market in the area of career guidance and some available which focus on survival skills. Few good motivational programs are designed for the slow learner. Of those programs that were reviewed, the Janus materials stand out as being exceptionally well designed and highly motivational. These materials are recommended as possibly being highly useful to teachers and students at Job Corps centers. In addition, Fearon and the Frank E. Richards Co., other publishers in tune with the needs of slow learners, are developing more material for this type of student.

This study has pointed out the need for a further definition of World of Work course content so that: (1) performance objectives and (2) adequate evaluation measures can be developed. Ideally, consultants and teachers could work jointly to redefine the objectives of the course and to structure it according to those objectives, building in evaluation measures or suggesting acceptable evaluation measures. This program development process should take place prior to selecting materials for inclusion into the program. With the addition of a structured system of accountability, the World of Work Program should be even more effective in preparing students for employment. In summary, as a result of the World of Work study, our recommendations include the following steps:

- A task force of teachers and consultants could work together to provide a coherent set of course objectives for the World of Work program.

- Before materials are chosen for the program, consultants and teachers should make sure that the curricula also contain criterion-referenced measures.

These are needed to ensure that the student is called upon to demonstrate his learning, so that he or she (and the program itself) can be adequately evaluated.

- Selected materials which meet these criteria could be pilot-tested at centers.

In general, Job Corps should consider developing the World of Work program into a larger and more significant role in the total educational program. Job Corps presently does not keep records of graduates' work histories beyond initial placement. Such long-term investigations would probably indicate that corpsmember graduates do not stay long in these initial placements, for most American workers change jobs at least once every three years, and workers in lower-level occupations more frequently than that. Given that fact, the skills developed by an adequate World of Work program may be as essential for survival in a mobile society as the specific knowledge provided by basic education and vocational training programs. An adequate World of Work program should provide each corpsmember with the skills necessary to make realistic occupational goals and plans, to locate job opportunities, to present oneself to advantage at an interview, to observe correct personal conduct on the job, and to know which steps to take when a job ends. Many of these needs are handled for the corpsmember by the placement office prior to the initial placement, but how many corpsmembers are prepared to do the same for themselves? Yet it is very likely that they will have to do many times throughout their working lives. Many publications and training programs have been developed to assist middle-class professionals in developing such "survival skills." However, such assistance is not generally provided for non-professional workers. The Janus Press materials, specifically units 6 through 8 of the Janus Job Planner, provide a good basis for developing such a program in life/work planning and job-changing skills. More curriculum development is needed in these areas, however, and Job Corps is uniquely situated to provide it.

NEW POLICY CONCERNING
JOB CORPS PAY AND ALLOWANCES

FEBRUARY 1979

OFFICE OF YOUTH PROGRAMS REPORT NUMBER 14

OVERVIEW

Job Corps pays monthly allowances to corpsmembers from which they are expected to provide personal items as well as recreation costs. A readjustment allowance is also provided upon termination based upon satisfactory performance. These allowances were established by the original Job Corps legislation. The maximum personal allowance was $35 per month for the first six months and $50 thereafter. The readjustment allowance could not exceed $50 for each month of participation. These legislative allowances were unchanged for nearly 15 years during which the cost of living more than doubled. The reauthorization of the Comprehensive Employment and Training Act in 1978 raised the maximum living allowance to $60 in the first six months and $100 thereafter. The maximum readjusted readjusted allowance was established as $100 per month.

Allowances serve several purposes, and the allowance policy within the legislation maximums must consider these purposes:

1. Minimal personal needs must be met as well as those of readjustment.
2. Entry level allowances are an inducement to recruiting.
3. Steeper allowance gradients based on duration of stay may promote retention.
4. Flexibility to reward exemplary performance can be used as an incentive.

There are tradeoffs between those goals and there is an overall concern with cost. In order to determine the most balanced policy consistent with budget concerns, a committee of Job Corps experts was established. This report contains its recommendations as well as underlying cost estimates.

ROBERT TAGGART
Administrator
Office of Youth Programs

NEW POLICY CONCERNING JOB CORPS ALLOWANCES

The CETA legislation of 1978 provides for new, higher limits governing payments to corpsmembers in, among others, living allowances and readjustment allowances. Living allowances pertains to the money paid to corpsmembers while they are actually in training at a Job Corps Center, and are commonly referred to as "wages". The readjustment allowance is a lump sum of money paid to qualifying corpsmembers (based upon a minimum length of time spent in training) upon termination from the program, and its use is intended as a "grubstake" to get an enrollee started in his/her new life. Downpayments on automobiles, purchases of work clothes, or security deposits on apartments are frequent uses of this money.

These new, higher limits are the first changes permitted with these allowances since Job Corps' inception in 1964, although the purchasing power of the 1964 dollar has fallen to forty-eight cents.

The new legislation establishes a maximum of $60 per month living allowance for the first six months and a maximum of $100 per month thereafter. For readjustment allowances, a maximum of $100 per month may be placed in an escrow account to be paid to enrollees staying at least 90 days, upon termination.

Within the parameters established by the legislation, the final fiscal policy determined by Job Corps could take several forms, any one of which would probably be endorsed by one interest group and condemned by others. The group concerned with recruitment, for example, would prefer to see maximum amounts paid so as to make the program more attractive to prospective corpsmembers. Center Directors, in a middle-ground approach, may wish to have more latitude so that increases in pay may be granted for exceptional performance and demonstrated leadership capabilities. The legislation in fact specifies that increases are to be granted "to encourage continued participation and recognize merit performance", thus endorsed by the latter opinion.

It was determined, therefore, that to begin development of Job Corps policy as it pertains to living and readjustment allowances, the widest practical range of interested and affected groups should be consulted. A nationwide representation was gathered in Washington on October 24-25, 1978. A roster of the conferees is appended showing representation for recruitment agencies, center directors, Departments of Agriculture and Interior, regional and national staff, and personnel from Army Finance Center in Indianapolis (which operates the Job Corps allowance system through interagency agreement).

The following pages summarize the recommendations of the conference. Also contained in the following pages are (1) charts which depict this proposed policy graphically (Figures A, B, C), and (2) a projection of FY1979 and FY1980 cost increases resulting from the policy as described herein.

It should be noted that the cost projections were developed after the conference, include allotments estimates which were not discussed at the conference, were predicated on an implementation date of April 1, 1979, and reflect the current plans for Job Corps build-up to an eventual steady state level of 44,000 corpsmembers. Hence, the additional amount needed for FY1979 is a relatively modest $16 million compared to $38 million for FY1980.

Living and Readjustment Allowances....	$37.3 million
Allotments............................	.4 million
Total	$37.7 million

This amount is approximately 87 percent increase over the current cost per man/year and does not include clothing allowances.

JOB CORPS ALLOWANCES

STUDY COMMITTEE REPORT
October 25, 1978

A Study Committee composed of representatives from Job Corps centers (both contract and Agency operated), recruitment agencies, the Army Finance Center, and regional and national offices met on October 24-25, 1978, to consider various options for bringing the Job Corps' allowance system into line with revised legislation (sec. 458). The policy recommended below for living and readjustment allowances is responsive to the legislative requirement for incremental increases. It has the further advantages of tying increases in allowances to critical drop-out periods, giving center directors a more viable financial incentive to use in encouraging increased length of stay, and recognizing exceptional work and leadership qualities.

LIVING ALLOWANCES (sec. 458(a)) (See Figure A)

Policy

Automatic initial allowance and increases:

0 - 60 days in active pay status: $40.00 per month
61 - 180 days in active pay status: $60.00 per month
over 180 days in active pay status: $80.00 per month

The center director would have the option to deny an automatic increase on the basis of good cause for a maximum of two months for the initial increase to $60 and for a maximum of three months for the second increase to $80. No corpsmembers would remain on center for more than four months at less than $60 or more than nine months at less than $80.

The additional $20 living allowance (the difference between $80 and the maximum $100) provided for by the Act would be given incrementally at the discretion of the center director for exceptional accomplishments and demonstrated leadership ability. No center may have more than 30% of its total enrollment at the $100 level.

Rationale

Thirty dollars has been the initial living allowance level for 14 years. The new initial level of forty dollars provides an increase over the present level and yet allows subsequent increases which are visible in corpsmember paychecks.

After sixty days' enrollment, a virtually automatic increase to the maximum $60 level occurs. The sixty-day point was chosen for several reasons:

- It allows sufficient time for orientation to center life and for training in personal "money management".
- It addresses the 30-day and 90-day termination patterns, providing inducement to remain past the critical first 30 days and provides the maximum allowable amount at and after the 90-day point.
- It meshes with the centers' system for evaluation of corpsmember progress, which is scheduled to occur around the 45th day of enrollment. This process identifies the small number of enrollees whose performance is inadequate, and results in deferring their increases up to 60 additional days.

After 180 days, a second increase occurs, to $80; as with the first, the raise may be deferred by the center director for unsatisfactory performance for up to three additional months. The six-month point is the earliest that the living allowance may rise above $60, according to legislation. Enrollees also qualify for home leave after six months, and the timing of the increase to $80 results in a larger paycheck when they return from leave. The increase also provides inducement to complete a vocational training program in full instead of exiting at a partial, step-off level. To maximize the inducement, eligibility for higher readjustment allowance levels occurs at the same time (see discussion of readjustment allowances, below).

There are provisions for two merit raises, to $90 and $100 (the statutory maximum), after six months' enrollment. These increases are not automatic, but are initiated by center directors to recognize noteworthy achievement and demonstrated leadership.

The proposed living allowance schedule was developed to enhance enrollee retention, in keeping with the legislation, as well as to provide enrollees with more adequate funds for their personal needs. The system of virtually automatic increases and a total of four allowance levels will reduce the amount of paperwork required by centers to administer the system to one-half or less the amount currently required, as well as reduce the paperwork processing at Army Finance Center. The standardized procedures will result in uniformity of allowance levels from center to center and region to region. The provision for denial of the automatic increases is designed to give the center director and center staff time to work with enrollees performing unsatisfactorily, and adheres to the legislative requirement for penalties as well as rewards in the allowance system. The proposed living allowance schedule will be easier for Job Corps recruiters to explain to applicants, and Job Corps enrollees will have a clearer understanding of what to expect and when.

READJUSTMENT ALLOWANCES (sec. 458(c)) (See Figures B, C)

Policy

0 - 180 days in pay status:	$75	per month accrual
181 - 270 days in pay status:	$75	per month accrual first six months;
	$100	per month accrual for each succeeding month.
271 - termination	$100	per month accrual for total period of enrollment in pay status.

Rationale

The center is hereby given an additional motivational tool, tied to an automatic living allowance increase, to keep the corpsmember after the critical 180-day dropout period.

There is additional incentive for corpsmembers to remain for at least nine months, and most corpsmembers require nine months or more to get their GED's and complete a vocational training program.

Although the legislation states that enrollees must stay "at least

90 days" to be eligible for readjustment allowance, all corpsmembers will be eligible after 180 days except those who have completed their program in less than 180 days, but not sooner than the legislated 90 days. (Current eligibility rules apply for medical discharges, deaths, armed service placements and maximum benefits completers.) The computation of the readjustment allowances will, for all terminees, be according to the policy stated above. For example, a program completer staying eight months would be entitled to ($75 X 6) + ($100 X 2) = $650. This would be a gross amount, subject to FICA and withholding tax. Similarly, an enrollee staying ten months would be entitled to $100 X 10 = $1,000 gross, less FICA and withholding tax. (These two examples, shown together, present a strong argument for an eight-month enrollee to stay an extra two months to complete; just in readjustment allowance alone, the corpsmember benefits by an additional $350.)

FIGURE A

JOB CORPS LIVING ALLOWANCE PROPOSED POLICY

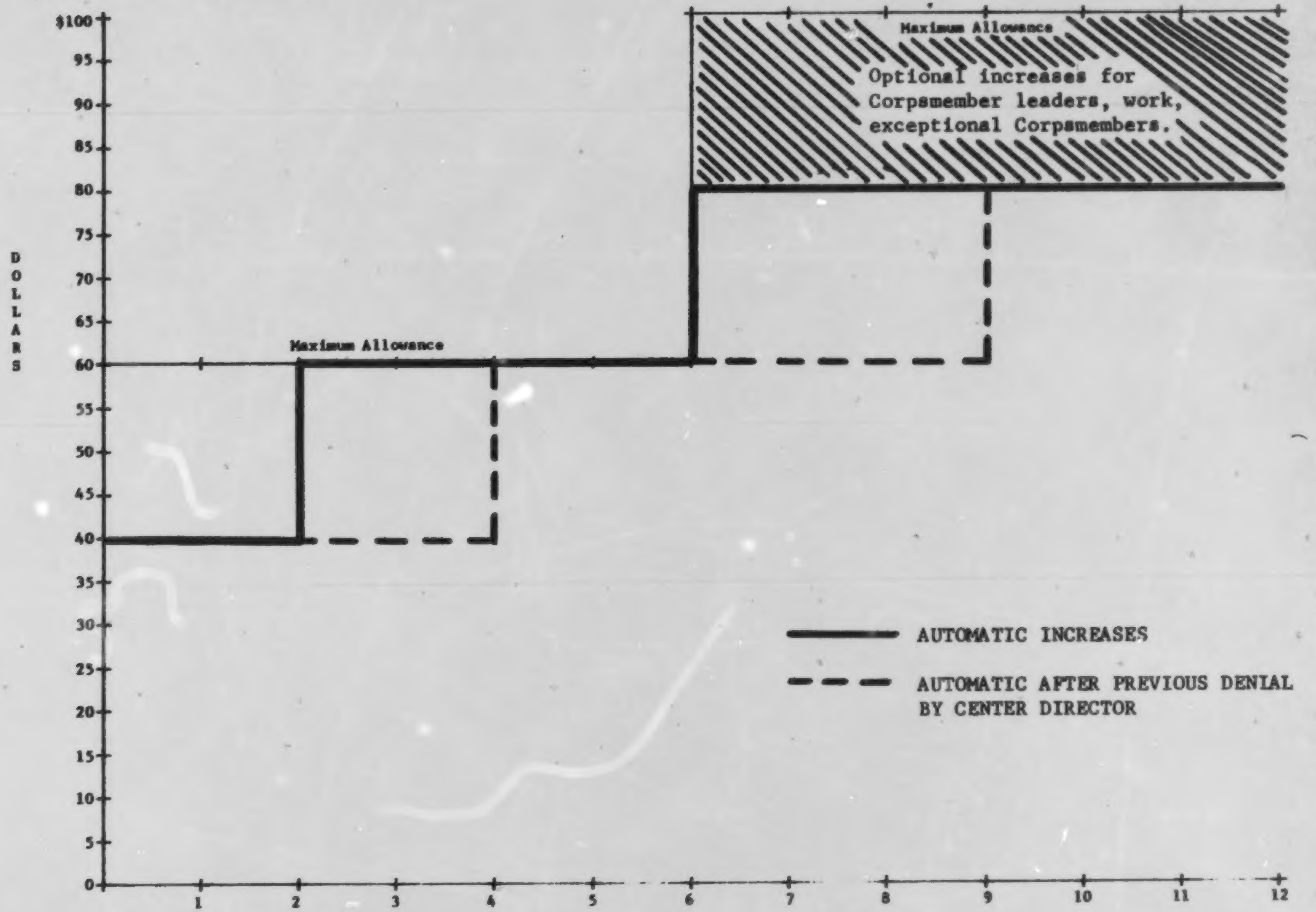
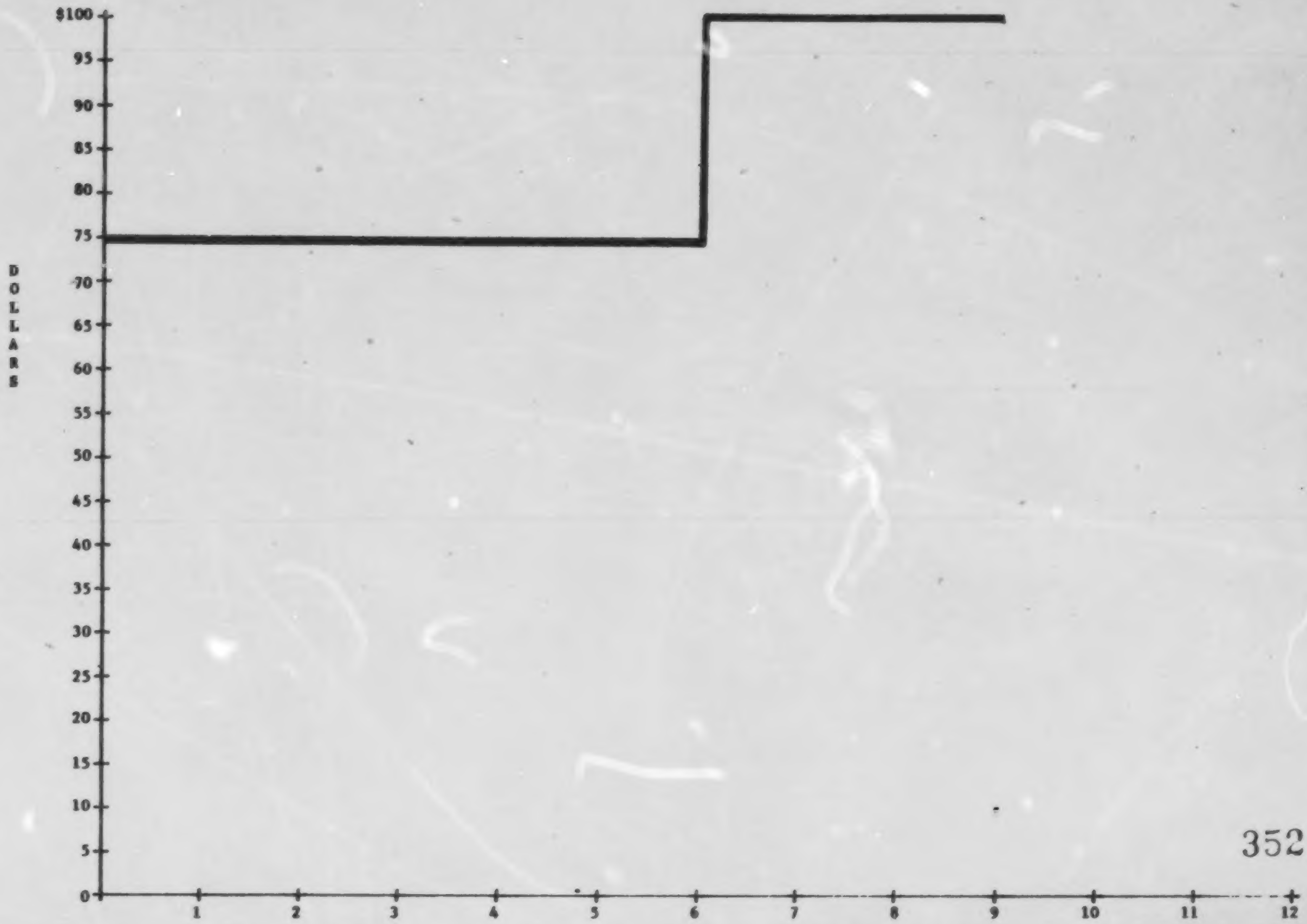
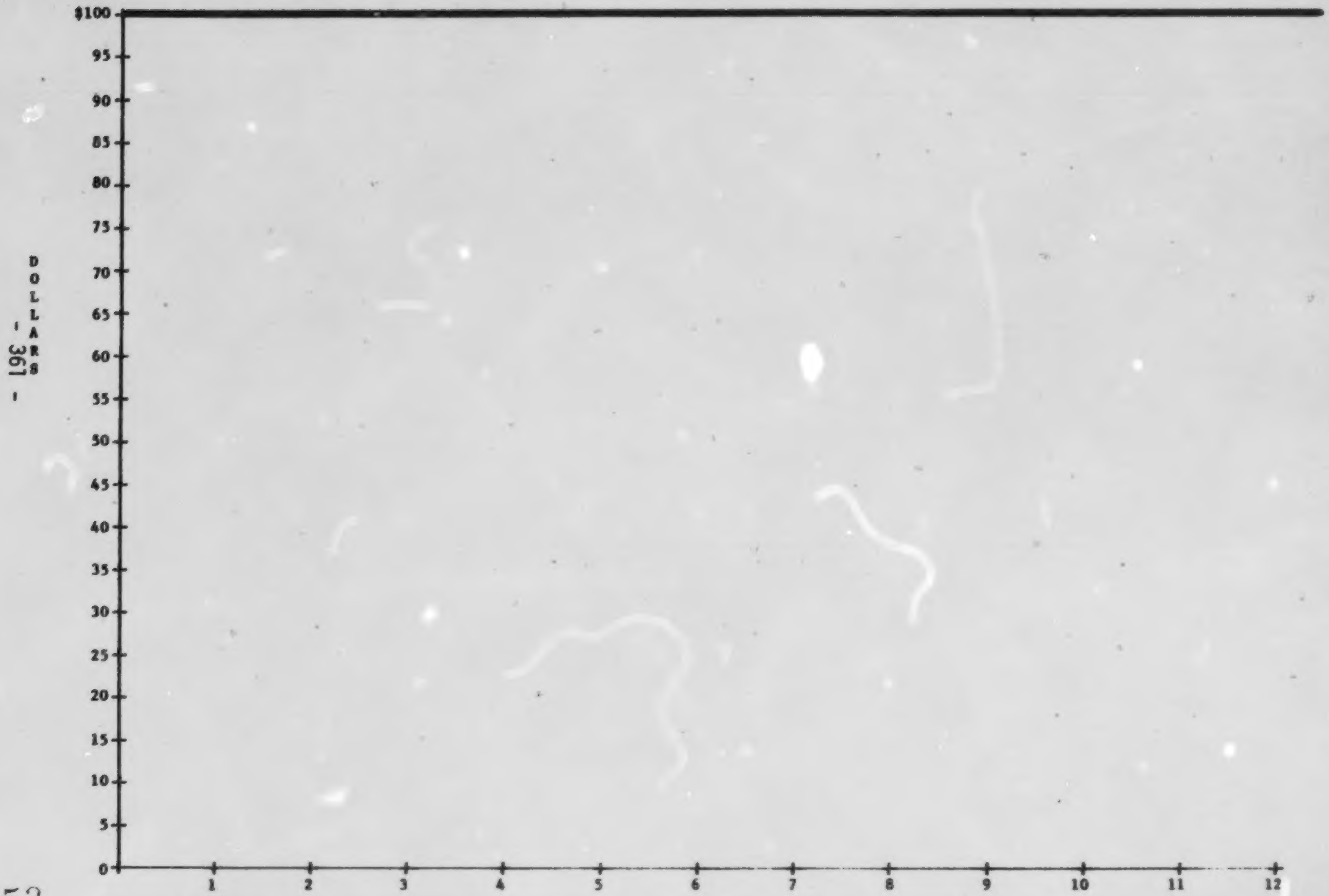


FIGURE B

READJUSTMENT ALLOWANCE ACCUMULATION RATE FOR FIRST NINE MONTHS



READJUSTMENT ALLOWANCE ACCUMULATION RATE FOR OVER NINE MONTHS LENGTH OF STAY



ESTIMATED COSTS OF NEW ALLOWANCE AND ALLOTMENT LEVELS

1. Estimate of Costs per Man/Year

a. Living Allowance: Based on the following assumed distribution of enrollees by pay level:

$ 40/mo.	30%
$ 60/mo.	30%
$ 80/mo.	10%
$ 90/mo.	10%
$100/mo.	10%

Average = $67/mo., or 804 per man/year, plus
FICA (5.75%): 46 "
Cost per man/year (total): $850 per man/year

b. Readjustment Allowance. Based on the assumed distribution given above plus actual FY 1978 data, yielding the following assumed terminee distribution:

Terminee Group	% of Total	Est. FY'78 Number	Avg. Length of Stay	Cost Current	Proposed
180 + day Terminees	40.0	19,280	11.5 mo.	$11,086,000	20,605,500*
90 - 179 day Completers	2.8	1,350	4.5	303,750	455,625
Medical Discharge (Under 6 mo.)	0.9	435	3.0	65,250	97,875
TOTALS	43.7	21,065		$11,455,000	21,159,000
Man/Year Average				500	924
plus FICA (5.75%)				29	53
Total Man/Year Average				529	977

---

* Based on 15% (7,230) staying 6-8 months (average = 7.5), and 25% (12,050) staying over 9 months (average = 13.5 months).

2. Estimated Impact on FY 1979 and FY 1980.

a. FY 1979

(1)

Assumed FY 1979 Man-Years:	34,450
First Half FY 79:	15,094
Second Half FY 79:	19,356

(2) Assumed implementation date for new pay levels: April 1, 1979.

(3) Cost estimates:

(a) First Half, FY 1979 at current levels
(FY 78 Living Allowance: $9,771,635 total, per Finance Center report, for 22,893 man/years = $427 man/year, plus 5.75% FICA employer's contribution, = $451 per man/year.)
(FY 78 Readjustment Allowance: estimated to be $529 per man/year in para. lb, above.)

15,094 man/years x 451:	$6,807,394	(Living)
" " x 529:	7,984,726	(Readjustment)
Total First Half	$14,792,120	

(b) Second Half

19,356 man/years x 850:	$16,452,600	(Living)
" " x 977:	18,910,812	(Readjustment)
Total Second Half	$35,363,412	

(c)

Total FY1979 estimate:	$50,155,532
(FY1979 at old levels):	33,761,000
Additional required	16,394,532

b. FY 1980 Requirements (for 44,000 man/years):

44,000 man/years x 850:	37,400,000	(Living)
" " x 977:	42,988,000	(Readjustment)
Total required:	80,388,000	

Total required:	80,388,000	
(FY1980 at old levels):	43,120,000	
Additional required	37,268,000	(86.4% increase over old levels)

3. Allotments. In FY 1978 the total government portion of allotments was $194,464 ($8.50 per man-year). Under the new pay policy the allotment levels will be doubled.

a. FY 1979

(1) First Half:	15,094 man/years x 850:	128,199
(2) Second Half:	19,356 " x 17.00:	329,052
Total FY 1979:		457,351
(FY 1979 at old level:		292,825)
Additional required		164,526

b. FY 1980: 44,000 man/years x 17.00:

FY 1980: 44,000 man/years x 17.00:	748,000
(FY 1980 at old level:	374,000)
Additional required	374,000

Note: These estimates assume the same eligibility criteria as currently apply.

Although allotments were not discussed at the October 24-25 conference, the following information is presented for the reader's use because of the potential magnitude of the issue.

Section 458(d) provides that such portion of the readjustment allowance as prescribed by the Secretary may be paid monthly during the period of service of the enrollee directly to a spouse or child of the enrollee, OR TO ANY RELATIVE WHO DRAWS SUBSTANTIAL SUPPORT FROM THE ENROLLEE, and any amount so paid shall be supplemented by the payment of an equal amount by the Secretary.

This language is essentially the same as it has been legislated historically. The amount prescribed by the Secretary has been up to $25, matched by an equal amount. However, in late 1967, Job Corps' policy was made more restrictive by removing from eligibility the ANY OTHER RELATIVE language capitalized above. The effect of allotment participation is shown in Figure D, following.

The cost estimates shown above assume this same restrictive posture even though the new legislation allows liberalizing. A projection of cost impact of such liberalization follows:

ESTIMATED ALLOTMENT COSTS UNDER LIBERAL ELIGIBILITY RULES:

1. Proportion of Enrollees Taking Allotments

   a. Current (limited to spouse and children): 3.2% (9/78)

   b. Estimated proportion - liberal eligibility (based on 1965-68 experience):

      (1) Second half, FY1979: 50 %
      (2) FY1980: 75 %

2. Allotment Level Distributions

   a. Current (9/78):

$10/month:	0 %
20/month:	1.4 %
30/month:	1.7 %
40/month:	1.5 %
50/month:	95.4 %
Total	100.0 %

Monthly Average = $49.09 ($24.54 = Gov't share)

   b. Estimated under liberal eligibility at new levels:

$20/month	1.0 %
40/month	3.0 %
60/month	6.0 %
80/month	12.0 %
100/month	78.0 %
Total	100.0 %

Monthly Average = $92.60 ($46.30 = Gov't share)

3. Estimated Corpsmember/Year Costs

   a. Limited eligibility

      (1) Old levels: $8.50
      (2) New levels: $17.00

   b. Liberal eligibility

      (1) FY1979

(a) First half:	15,094 man/years X $8.50	= $ 128,199
(b) Second half:	19,356 man/years X277.80[1]	= 5,377,097
Total	34,450	$5,505,296
(FY1979 under limited eligibility):		457,351
Additional required:		$5,047,945

      (2) FY1980

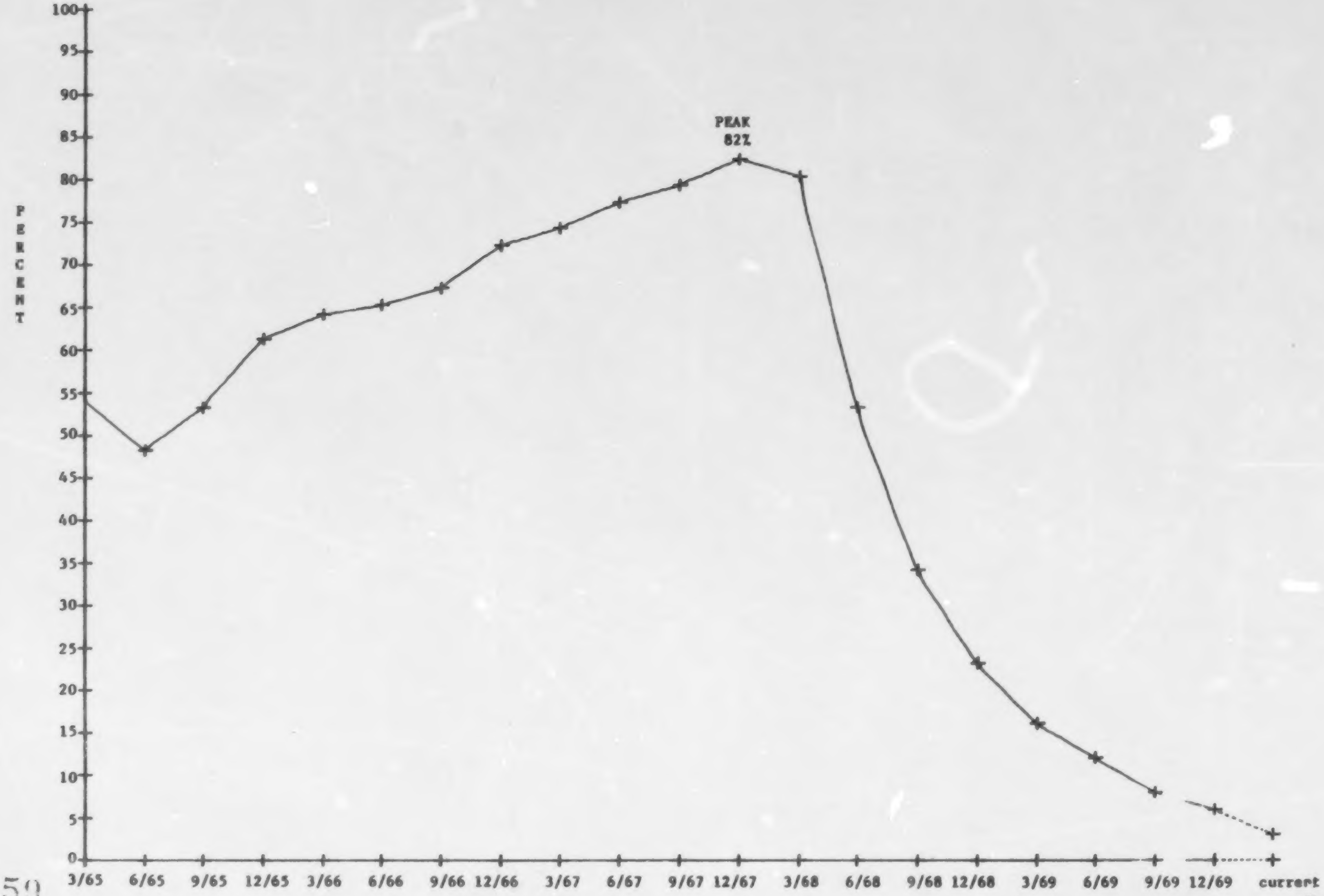
(a) Liberal eligibility 44,000 X $417[2]	= $18,334,800
(b) Limited eligibility 44,000 X $ 17	= 748,000
Additional required:	$17,586,800

---

[1] $46.30 X 12 months X 50% = $277.80
[2] $46.30 X 12 months X 75% = $417.00

FIGURE D

PERCENT OF JOB CORPS ENROLLEES WITH ALLOTMENTS



The discussion thus far has centered around the government share of allotments as a cost. In addition, approximately $8 million would be removed from the readjustment escrow account for the estimated 45% enrollee man/years which would not qualify for readjustment allowances.[1/] Under current policies, this amount would be returned from the escrow account to the general account when non-qualifying-for-readjustment enrollees terminate. However, under a liberal policy, this money would have been paid out as these enrollees' share of their allotments.

A liberalized allotment policy could be viewed by some enrollees as an easy means to extract the full $100 per month readjustment allowance after each month of stay. For example, an enrollee could allot $50 of his/her readjustment allowance, matched by another $50, thereby sending the full $100 to the "relative" of his/her choice after the first and every succeeding month.

Such abuse could totally erode the anticipated benefits of the living allowance policy and especially the readjustment policy. Further, under a liberalized policy, validation of eligible allotees would be an impossible task.

[1/] A conservative estimate for FY1980. Depending on assumptions, the figure could go as high as $14 million.

Regardless of whether a liberal or limited allotment policy is adopted, the following table shows what occurs in each enrollee's account where maximum allotments are designated. Assume that an enrollee enters Job Corps, takes out the full allotment, gets automatic increases on time, but does not get merit increases above $80. The first four rows show incremental amounts; the fifth row shows cumulative amounts. The fourth and fifth rows show the amounts paid to the enrollee and the allotment designee IF THE ENROLLEE TERMINATED AFTER THAT MONTH.

FIGURE E

AN EXAMPLE: CUMULATIVE AND OUTLAY EFFECT PER CORPSMEMBER, ASSUMING FULL ALLOTMENT, UNDER NEW POLICY

		AFTER MONTH 1	2	3	4	5	6	7	8	9	10
READJUSTMENT ACCOUNT CREDIT		$75	$75	$75	$75	$75	$75	$100	$100	$100	$100
READJUSTMENT ACCOUNT AFTER ALLOTMENT DEDUCTION		25	25	25	25	25	25	50	50	200	50
LIVING ALLOWANCE		40	40	60	60	60	60	80	80	80	80
TOTAL CASH TO TERMINEE AND ALLOTTEE	(Allotment)	100	100	100	100	100	100	100	100	100	100
	(Living Allow.)	40	40	60	60	60	60	80	80	80	80
	(Readjustment)						150	200	250	450	500
	(Total)	140	140	160	160	160	310	380	430	630	680
CUMULATIVE AMOUNT PAID TO TERMINEE AND ALLOTTEE		140	280	440	600	760	1,070	1,300	1,530	1,910	2,140

ROSTER

Job Corps Living Allowance Conference, October 24-25, 1978

Stanley Leibner, National Office, Chairperson

John Fischer, National Office, Conference Coordinator

Carl Shugaar, National Office, Enrollee Support

Jim Blackburn, National Office, Enrollee Support

Jack Seligman, National Office, Enrollee Support

Dan Gallagher, National Office, Recruitment

Anola Harris, National Office, Asst. to Director

John Amos, National Office, Performance Analysis

Dick Jaffe, Region III ARA

Al Stevens, Region IV

Ralph Bowman, Region V

Paul Rollin, Region VI

Don Buchannon, Region X

Jerry Oettle, Breckinridge Center Director

John Acquilano, former Glenmont Center Director

Bob Bowman, Woodstock Center Director

Jim Banks, Dept. of Interior

Hank Delaney, Dept. of Agriculture

Bill Jones, Dept. of Agriculture

Jerry Kovis, Marsing Center Director

Bill Onstott, Wolf Creek Center Director

Bob Wingerter, Army Finance Center

W. L. Rickert, Army Finance Center

Sue Huber, Army Finance Center

Christopher McKenney, Delaware State Employment Office

Tim Betts, Baltimore Prime Sponsor

Synopsis of the Findings of the Pay and Allowance Experiment

Office of Youth Programs
Report Number 15

February 1979

OVERVIEW

This experiment was developed to determine the impacts of different allowance formulations on the retention and dropout patterns of corpsmembers. This was not a test of increased allowances because living allowance increases were offset by readjusted allowance decreases, and both are structured to encourage longer stay. The variations between the experimental and control centers were not large enough to yield significant predicted impacts except in one case. The limited number of sites and the short duration of the experiment precluded any definitive findings.

On the whole, it does not appear that higher living allowances in the experimental centers led to marked improvements in dropout rates except in the case where the most significant increases occurred. Only a small proportion of terminees claim that inadequate allowances were a reason for leaving raising questions about the potential of allowances to affect retention. Further experimentation on a much larger scale would be necessary to draw more definitive conclusions.

Synopsis of the Findings of the Pay and Allowance Experiment

In November, 1976, three experiments were begun to compare variations in Corpsmember (CM) length of stay and overall performance in Job Corps (JC) Centers where allowances were increased, as opposed to Centers where allowances remained unchanged.

Under JC policy, CMs receive three types of monetary payments, plus some inkind services (such as medical/dental treatment, housing for certain CMs, and work clothing). The standard monetary payments are: $30 per month living allowance (used for toiletries, off-center expenses such as coffee breaks at on-the-job training sites, transportation to visit dependents, and contributions toward support of dependents; a total of $20 as possible merit pay during the first six months of training; and a re-adjustment allowance earned at the rate of $50 per month starting with the first month but payable only after the completion of at least six months of training. The re-adjustment allowance is generally about $300 and is supposed to enable the CM to enter the world of work by paying for necessary expenses until receipt of a first paycheck. The re-adjustment pay is an allowance which is supposed to cover union dues, tools, transportation to and from work, first month apartment rent, and similar "start-up" costs for entry into the work force.

A study of the impact of variations in the allowances of Job Corps members was conducted during 1977 at three selected Job Corps centers, with three other centers with similar characteristics serving as control centers. The centers at which the allowance variation experiment were conducted are:

Region VII:	Pine Ridge Job Corps Civilian Conservation Center
Region IX:	Phoenix Job Corps Center
Region X:	Columbia Basin Job Corps Civilian Conservation Center

The centers used as controls were:

Region IX: San Jose Job Corps Center
(Paired with Phoenix JCC.)

Region X: Wolf Creek Job Corps Civilian Conservation Center (Paired with Columbia Basin JCCCC.)

Marsing Job Corps Civilian Conservation Center (Paired with Pine Ridge JCCCC.)

The allowance variation plans are those which were proposed by the three centers and endorsed by their supervising region or conservation agency. In brief, the allowance variation plans were:

Columbia Basic JCCCC. After six months service, a portion of accrued readjustment allowances were paid monthly to each Corpsmember as an addition to living allowances. The total amount paid to any Corpsmember was increased. The schedule and arrangement for payment of clothing allowances was also changed.

Pine Ridge JCCCC. Living allowances to Corpsmembers who qualified for promotion were increased faster than previously, and the increase was offset against readjustment allowances. Since some Corpsmembers who received this increase in living allowance did not stay long enough to qualify for readjustment allowances, there were small increases in total allowances payments to Corpsmembers.

Phoenix JCC. Living allowances for those who qualified for promotion were increased faster and the increase was only partially offset against readjustment allowances. Since some Corpsmembers did not remain long enough to qualify for the readjustment allowances, and since the increase is living allowance was larger than the decrease in readjustment allowances, Corpsmembers received an estimated average additional allowance of about $10 per month, or a total increase in allowances at the center of about $50,000 per annum.

For these experiments, the money for the increased living allowance payments was obtained by taking it from the re-adjustment allowance. As can be seen from Figure 1, the increase in living allowance was very small as an increment but large in impact on the re-adjustment allowance. While this transfer of funds very slightly eased CM financial problems during training, it created anxiety and frustration among CMs as to what they would do for necessary expense upon completion of training and before receipt of their first pay check. It is entirely possible that the improved retention from the living allowance increase was offset by the declining attraction of the readjustment allowance which is only paid after a certain length of stay.

Nevertheless, as can be seen by comparing the total amount of living allowance payments by Center as shown in Figure 1, with Figures 2 and 5 which present the Mean length of stay in days, the 30 day dropout rate, and the 90 day dropout rate, there is a direct relationship between retention and the total amount of living allowance offered by each Center. Pine Ridge, offering $705, has the best retention record, Columbia Basin, offering $585, has the second best record, and Phoenix, offering only $125, is suffering severe retention problems.

On the other hand, the three experimental centers have higher dropout rates than the control centers and in two of the three cases have greater increased in the dropout rate during the experimental program.

Terminees from the six centers were interviewed to determine their reasons for leaving Job Corps. Less than 1 percent responded that they left because the allowance was too small, and the proportion was three times higher in the experimental centers than in the control sites.

Figure 1

LIVING ALLOWANCE: PRIOR -- EXPERIMENTAL

MONTHS	JOB CORPS STANDARD LIVING ALLOWANCE	EXPERIMENTAL LIVING ALLOWANCE		
		PHOENIX	COLUMBIA BASIN	PINE RIDGE
1	30	30	30	30
2	30	30	30	30
3	30	30	30	30
4	30	30	55	45
5	30	30	55	55
6	30	40	55	65
7	30	40	55	70
8	30	40	55	70
9	30	50	55	75
10	30	50	55	75
11	30	50	55	80
12	30	65	55	80

Total Experimental Living Allowance	485	585	705
Less JC Standard Living Allowance	-360	-360	-360
Amount Deducted from Readjustment Allowance	125	225	345

Figure 2. Retention Rates, by Center*

Center		Sample Size	Mean Length of Stay in Days	Standard Deviation	30 Day Drop Out Rate		90 Day Drop Out Rate	
Experimental:	Pine Ridge	93	105.1	62.3	12.9	sig.	48.4	sig.
Control:	Marsing	120	84.2	67.2	26.7		60.0	
Experimental:	Phoenix	250	75.7	57.6	27.21	n.s	63.97	sig.
Control;	San Jose	116	105.9	61.6	25.0		48.28	
Experimental:	Columbia Basin	105	87.9	72.8	24.8	n.s	61.0	sig.
Control;	Wolf Creek	157	95.9	73.8	22.3		54.8	

Figure 3. Retention Rates, Totals

Center Type	Sample Size	Mean Length of Stay in Days	Standard Deviation	30 Day Drop Out Rate		90 Day Drop Out Rate	
Experimental	448	84.7	63.5	23.7	n.s	60.0	sig.
Control	393	94.8	69.2	23.4		52.7	

* All San Jose figures adjusted to reflect the effects of a policy change which decreased termination rates after the beginning of the experiments.

Figure 4. Changes in 30 Day Drop Out Rates by Individual Center Rate of Increase

Center	FY'76	FY '77-78
Pine Ridge	10.5	12.9 n.s.
Marsing	16.8	26.7 sig.
Phoenix	16.7	27.1 sig.
San Jose	22.0	25.0 n.s.
Columbia Basin	22.7	24.8 n.s.
Wolf Creek	21.3	22.3 n.s.

Figure 5. Changes in 30 Day Drop Out Rates - A Comparison of Experimental and Control Centers

	Center	FY'76	FY '77-78	
Experimental:	Pine Ridge	10.5	12.9	sig.
Control:	Marsing	16.8	26.7	
Experimental:	Phoenix	16.7	27.2	sig.
Control:	San Jose	22.0	25.0	
Experimental:	Columbia Basin	22.7	24.8	n.s.
Control:	Wolf Creek	21.3	22.3	

REPORT ON THE JOB CORPS
NUTRITION SURVEY

Office of Youth Programs
Report Number 16

February 1979

OVERVIEW

The one aspect of Job Corps which receives overwhelmingly negative ratings by corpsmembers is the food. It is not unusual to hear complaints about the fare in institutional settings, but neither should the complaints be blithely dismissed. Annual expenditures for food per corpsmember dropped by a third in real terms over the last decade, and this could be expected to have an impact on both the quality and quantity of food served.

This comprehensive study documents that Job Corps still serves nutritionally sound meals, but that there are problems in corpsmember food selection and wastage raising serious doubts whether the tastes of enrollees are being fully considered. There is clearly need for improvement in the types of food served as well as in the nutritional education of corpsmembers. The recommendations included in the report are a good starting point.

Robert Taggart
Administrator
Office of Youth Programs

TABLE OF CONTENTS

Page

SUMMARY 387

STUDY METHODS 388

FINDINGS, OBSERVATIONS, AND DISCUSSION. 389

INTEGRATING NUTRITION PROGRAMS INTO JOB CORPS CENTERS: RECOMMENDATIONS AND PLANS . . . 392

CONCLUSION. 398

APPENDIXES:

A. Tables of Overall Findings 401

B. Review of the Literature on Teenage Food Habits. 411

SUMMARY

The National Health Office (NHO) conducted a nutrition survey from August 1977 through March 1978 to determine whether nutritionally sound meals were served and consumed at Job Corps centers. The goal was to insure that corpsmembers were nutritionally well fed, but not overfed and that food was not wasted.

The survey results indicated that all Job Corps centers visited provide a variety of attractive and palatable foods sufficient in quality. *However, excessive amounts of carbohydrates (specifically starches) are served, contributing to consumption of an unbalanced diet, overweight and nutrient deficiencies, and unnecessary food waste.*

In spite of the need for better dietary guidelines, many centers have already begun programs to improve the foodservice. The interest of center staff in the nutritional status of corpsmembers is obviously present at every center.

As a result of the survey, the National Health Office is developing dietary guidelines for all centers and will provide technical assistance to individual centers. Following the survey, the NHO applied for FY 79 Technical Assistance and Training Funds to provide training in nutrition. Pending approval, centers wishing to obtain technical assistance concerning nutrition, foodservice management, and/or food sanitation may request it through the appropriate regional office. In the meantime, this report includes many ways in which center staff can begin to improve nutrition education and service and cut down on food waste.

STUDY METHODS

Federal regulations require that meals for Job Corpsmembers be "nutritionally well-balanced, of good quality, and sufficient in quantity."* To determine if these Federal regulations were being satisfactorily met, the Job Corps National Health Office conducted a nutrition survey from August 1977 through March 1978.

A qualified nutritionist visited fourteen centers in seven regions. These centers were as follow:

III	IV	V	VI	VII	IX	X
Blue Ridge	Atlanta	Cleveland	Albuquerque	Excelsior Springs	Koko Head	Columbia Basin
Harpers Ferry	Breckinridge		Guthrie			
Keystone	Schenck		Tulsa			

The centers were chosen according to size, geographic location, diversity of ethnic group, enrollment of males and females, and type of center (i.e., contract vs. conservation) to provide a representative base.

The first part of the survey was a pretest conducted at the six centers in Regions III and IV. Corpsmembers at each center were surveyed through questionnaires and observed for their food selection practices. The observations took place at each of three meals during a 1-day period. Center directors, food-service staff, health service staff, and teachers were interviewed as well.

In view of the findings from the pretest, eight additional centers in Regions V, VI, VII, IX, and X were visited. The same format for observing and interviewing was followed, but revised survey instruments were used.

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*Specified in the Federal regulations under Title 29, Code of Federal Regulations (CFR), Section 97a.82, as amended.

Upon completion of the survey, the eight additional centers forwarded their questionnaires to the National Health Office. Because one center's questionnaires were lost in the mail, numerical data could only be computerized and analyzed for seven of the eight centers.

The numerical data in this report is based on the responses of 270 corpsmembers at those 7 centers. However, findings and recommendations are based on observations at all 14 centers. Under separate cover, each of the seven centers from the second part of the survey will receive detailed tables showing the findings at that center in comparison with the other centers surveyed.

FINDINGS, OBSERVATIONS, AND DISCUSSION

All Job Corps centers visited provide high quality, attractive, and appetizing meals. On the whole, they serve a variety of menu items from each of the Four Food Groups (Meat, Milk, Fruits and Vegetables, Bread and Cereals). *However, excessive amounts of carbohydrates (specifically starches) are served, contributing to consumption of an unbalanced diet, overweight and nutrient deficiencies, and unnecessary food waste.*

Corpsmembers are not consuming nutritionally well-balanced meals.

Observation of three meals eaten in a 1-day period revealed that corpsmembers make unwise food choices. Only one-third of the corpsmembers surveyed selected well-balanced meals; two-thirds selected mostly meat and high starch foods and neglected vegetables and dairy products.

Few differences in food preferences exist between males and females and the various ethnic groups. A majority of corpsmembers listed hamburger as their favorite food, with steak or chicken as their next favorite. Aside from meats, carbohydrate foods in the form of starches are the most popular and most frequently selected items. Consequently, when a center serves a number of starches such as french-fried potatoes, mashed potatoes, corn, bread, and rolls at one meal, corpsmembers will choose all of these and frequently more than one helping of each.

Carbohydrates supply much of the energy that teenagers need for their bodies to perform properly. However, if consumed in excess of body energy needs, carbohydrates are converted into fat, leading to overweight and obesity. Obesity is a common problem at Job Corps centers--particularly among female corpsmembers. Although this problem cannot be attributed totally to overconsumption of carbohydrates or starches, corpsmembers do consume excess amounts of these foods. Health service staff reported that many corpsmembers gain 10 to 20 pounds the first few months after entering Job Corps, in centers where food is served in unlimited quantities. Additionally, portion sizes of starchy foods are frequently large, further contributing to excessive food intakes.

Lack of good nutrition is not only due to the overconsumption of carbohydrates, but also the underconsumption of other essential nutrients. An analysis of three successive meals eaten suggests that some corpsmembers receive insufficient amounts of vitamins A, C, and D, niacin, thiamine, calcium, iron, and fiber.

Vegetables are a valuable source of vitamins and minerals. However, teenagers are more inclined to neglect vegetables than any other food group. Job Corpsmembers are no exception. Some centers have increased acceptance of vegetables by preparing them in interesting ways.

Seventy percent of corpsmembers reported eating snacks between meals. Despite popular belief, snacks can contribute important vitamins and minerals.

Unfortunately, center vending machines, vendors, or canteens offer mostly high calorie, low nutrient snacks. Therefore, some centers have added a snack service to the daily meal plan. This provides corpsmembers with essential nutrients that they sometimes miss at their regular meals.

Corpsmembers waste a lot of food.

An important finding is the amount of food wasted at Job Corps. In spite of the large quantities of food taken at meals, much of it is thrown away, particularly starchy foods, vegetables, and dairy products. Butter, jams, jellies, and sugar, which are left on the serving tray for unlimited service, are also frequently thrown away. Not only does food waste represent a substantial loss in nutrients to corpsmembers, but also a substantial loss of money for Job Corps centers.

The interest of center staff in the nutritional status of corpsmembers is evident at all centers.

Some centers have already taken steps to improve nutritional status and reduce food waste by limiting portion sizes, introducing new and more nutritious menu items, and eliminating unpopular menu items. Other centers have remodeled their cafeterias, initiated evening snack services, and organized weight reduction classes.

Teachers, health service staff, foodservice staff, administrators, and corpsmembers were receptive to and readily cooperated with the survey. Despite limited resources, each staff group asked how they could improve nutrition knowledge, attitudes, and practices. Corpsmembers themselves play an active part in the planning of menus at some centers. Their responses to the survey indicated that 80 percent are concerned about the food they eat; 74 percent would like more information on good nutrition. When center staff and corpsmembers work together in a common goal, acceptance is improved, better balanced meals are consumed, and less food is wasted.

INTEGRATING NUTRITION PROGRAMS INTO JOB CORPS CENTERS: RECOMMENDATIONS AND PLANS

Job Corps center staff can begin implementing nutrition activities. Here are some suggestions:

Suggestions For Foodservice Staff

- Serve fewer starchy foods at each meal. For example, serve bread or potatoes or rice. Don't leave bread out on the serving line, but give it to corpsmembers, asking them how many slices they want.
- Cut down on the use of fats. Fats have twice as many calories as proteins, sugars, and starches. Put butter pats on the dish instead of on the serving line. Do the same with sugar packets. Avoid extra fats and sugar whenever possible such as in fried foods, sugar-coated cereals, or sugar-sweetened drinks (serve unsweetened fruit drinks).
- Try to improve overall nutrition and food acceptance. Add salad bars that include a variety of raw fruit and vegetables; provide sandwich makings as a second entree to lunch and dinner; use whole wheat and/or high fiber breads instead of white bread; and serve different kinds of milk, such as skim, low-fat, buttermilk, and chocolate. Prepare vegetables in new and interesting ways; e.g., french-frying, adding cheese sauces, and baking in casseroles.

- Include snacks in meal service planning. It is important that the snack be nutritious. You might use fresh fruit; raw vegetables; a mixture of sunflower seeds, nuts, and raisins; peanut butter crackers; milk; yogurt; or fruit juices. Depending on your staff and facilities, you may want to serve sandwiches, pizza, tacos, or salads, or put out leftover meat from lunch or dinner for sandwiches.
- "Teach" corpsmembers about the food you serve. How may times a day do you hear "What's that?" This is an ideal time to say--"It's broiled fish and it's cooked that way because it has much fewer calories than fried fish." You can also meet with new corpsmembers during their orientation period. You could give them a tour of the cafeteria and at the same time, explain to them the kind of food they will receive at Job Corps, how these foods may differ from what they had at home, and some special problems that could result--like gaining excess weight. You can also teach corpsmembers about food by promoting "advertising campaigns." Have corpsmembers help you with such activities as hanging nutrition posters in the cafeteria; placing signs in front of foods to indicate the number of calories; and providing special dietary information about featured food--for example, "Try our vitamin A carrot bread--our special for breakfast today."

Suggestions for Health Service Staff

- Attempt to identify those corpsmembers who were overweight upon entry to Job Corps as well as those who are gaining weight since entry. Encourage them to begin a weight reduction program. Emphasize exercise as an important factor in weight loss. If you don't have the time or facilities to offer extended counseling, teaching, and encouragement, suggest an off-campus weight reduction program such as Weight Watchers, Inc.
- Work with foodservice staff when special diets are required. Take time to explain these diets to corpsmembers and to foodservice staff.
- Plan orientation sessions for new corpsmembers and explain to them the potential of weight gain. Stress the health benefits of an adequate diet, maintaining ideal weight, and exercise.
- Place nutrition brochures and posters in the waiting rooms of your clinics.

Suggestions for Health Educators

- Identify what topics in food and nutrition are of most interest to teenagers, for example, nutrition for athletes, diet for young women on oral contraceptives, weight control, etc. Use topics such as these to teach the basics of nutrition.
- Utilize some of the excellent nutrition audiovisuals available. Many have direct appeal to teenagers and can be borrowed free of charge. Also games, comic books, and other student-centered activities on foods and nutrition are available.

- Get students actively involved in nutrition. For example, take them to grocery stores where they can see and understand food labeling firsthand. Have them do comparison shopping. Take them to food manufacturing companies if there are any nearby. Have them evaluate their own diets as to nutritive value, calories, and energy expended. Suggest that they develop recipes that are high in nutrients for the foodservice staff. Have them prepare special "high in nutrient" snack foods. In all, get them involved in food-related activities they like and to which they can relate.

Suggestions for Center Administrative Staff

- Try to involve corpsmembers in the foodservice operation. Work with the student government in the formation of a diet or nutrition committee that will be responsible for taking complaints and suggestions to the staff about the foodservice. Suggest that this committee develop ways to promote better nutrition (poster contests, new recipe development, initiation of special or holiday meals, etc.). Initiate a campus-wide food survey to find out what corpsmembers like and dislike about the foodservice.
- Investigate the possibilities for adding nutritious snacks to vending machines and center canteens. Snacks such as apples, milk, granola bars, raisins, nuts, yogurt, juice, etc., are available for vending machine sales, and studies show that teenagers will select these items if available to them.

Suggestions for Other Job Corps Staff

- Eat periodically in the cafeteria to foster better relations between staff and corpsmembers, to improve corpsmember acceptance of food served, and to decrease food waste. Incidentally, you can get a good and inexpensive meal.
- You can help implement nutrition activities at your center by promoting any of the suggestions mentioned above or any of your own initiative.

Suggestions for Job Corps Regional Offices

- Coordinate nutrition activities among centers in your region. Region X, for example, presently conducts a "Food Fair" in which corpsmembers plan and prepare meals by themselves in competition with other centers in the region.
- Provide or request technical assistance and training on nutrition and foodservice for those centers that need it.
- Project Managers - you can improve nutritional status and food acceptance by periodically eating in the center cafeteria and by recommending nutrition activities such as those outlined above, if needed.
- Regional Review Teams - corpsmembers usually complain about the food (and the health service). Check out their complaints carefully in your review, and see that actual deficiencies are corrected.

The National Health Office will assist center staff in their efforts to improve the foodservice and the nutritional status of corpsmembers. It plans to do the following:

Develop guidelines for meal planning.

Many centers utilize the Army Master Menus. These guidelines were developed for a population other than Job Corpsmembers. In providing guidelines to Job Corps, the NHO will consider the needs of all centers, yet allow for adaptation by individual centers. For example, guidelines will indicate portion sizes for male and female corpsmembers, for corpsmembers who are involved in heavy labor and require more calories each day, and for female corpsmembers who take oral contraceptives. Guidelines will also include alternative ways to meet nutrient requirements. Planned menus will accompany these guidelines.

Provide workshops and technical assistance to foodservice staff and other staff.

Innovations in foodservice as well as new findings and research in nutrition science are areas in which foodservice staff and other staff seldom have the time to keep current. Center staff representatives will be brought together in regional workshops for training in meal planning, sanitation, management, etc. The NHO will also offer technical assistance to individual centers to show staff how to apply this information.

The NHO has already begun to provide technical assistance through the development of a booklet written especially for Job Corps foodservice staff entitled "Ten Ways to Cut Down on Plate Waste."

Provide workshops and technical assistance to health service staff.

Due to hectic schedules, many health service staff also find it difficult to remain up-to-date on nutrition information. In addition, the frustrations of poor responses to nutrition counseling often discourage them from doing any counseling at all. The NHO can provide a valuable service to health service staff through workshops and individual technical assistance, which will lessen these concerns and improve nutrition services.

The NHO has already begun developing a booklet and diet guide to aid the health service staff in nutrition counseling of overweight corpsmembers.

Provide technical assistance to health education teachers.

Health education teachers also have critical needs for technical assistance as they are the ones providing the nutrition knowledge to corpsmembers in their health education classes. Unfortunately, their nutrition resources are very limited. The needs of health educators are already being considered in a publication called "Nutrition Education Resources for Health Educators and Health Providers," developed specifically for Job Corps. In addition, technical assistance may be provided through information bulletins, periodical mailouts of new and available nutrition information, or special workshops for health educators.

CONCLUSION

This report identifies areas of nutritional needs and points out what can and will be done to meet these needs. The ultimate goal of center staff should be to promote optimum nutrition of corpsmembers.

A successful nutrition program is dependent upon the knowledge, cooperation, and participation not only of center staff, but most importantly, the corpsmembers themselves. When corpsmembers are motivated to improve their nutrition, they are more likely to choose and eat well-balanced meals. To motivate corpsmembers, foodservice staff, health service staff, health educators,

399

administrators, and regional staff must take an active part in nutrition programs.

Given the interest and involvement already exhibited by center and regional staff, Job Corps nutrition programs should be successful.

APPENDIX A

TABLES OF OVERALL FINDINGS

TABLE 1.—Overall Responses of 270 Corpsmembers to "Food Survey for Job Corpsmembers"

Response to the Question	Percent Responding
Corpsmembers who think they eat well-balanced meals "most of the time."	66
Corpsmembers who are concerned about the food they eat.	80
Corpsmembers who would like more information on good nutrition.	74
Corpsmembers who think the best way to get information on nutrition is through	
books	63
teachers	17
Corpsmembers who skip meals	
seldom	26
once in awhile	42
often	30
Reason for skipping meals is	
no time	13
don't like food	43
not hungry	28
Corpsmembers who eat snacks between meals.	70
How food habits have changed since coming to Job Corps:	
eat more	18
eat less	44
eat better balanced meals	15
habits are same	17
Glasses of milk corpsmembers drink each day	
2 or more	73
4 or more	33
Beverage most often selected at meals	
milk	43
fruit juice	23
soft drinks	23

continued

TABLE 1.—Overall Responses of 270 Corpsmembers to "Food Survey for Job Corpsmembers"

Response to the Question	
Kinds of snacks chosen.	1) soft drinks 2) potato chips or crackers 3) fruit or fruit juices
Foods corpsmembers would like to see more of in the cafeteria.	1) meats 2) fresh fruits 3) milk products
Three foods at Job Corps that corpsmembers like best.	1) hamburgers 2) chicken or steak 3) fruits
Three foods at Job Corps that corpsmembers like least.	1) potato 2) eggs 3) liver

Table 2.—Overall Opinions of 270 Corpsmembers about Job Corps Foodservice

Please rate the foodservice according to:	Percent of Corpsmembers Responding				
	Excellent	Very Good	Good	Fair	Poor
Cafeteria Appearance	9	20	29	27	6
Speed of Service	5	12	27	33	15
Food Attractiveness	3	4	23	37	23
Taste of Food	2	3	17	48	22
Variety of Food	3	8	21	37	22
Temperature of Food	4	7	17	29	33
Preparation of Food	2	9	17	37	27
Cleanliness of Cafeteria	12	17	30	22	12
Attitude of Servers	9	19	17	25	22

TABLE 3.—Overall Opinions of Teachers about Job Corps Foodservice

Please rate the food service according to:	Percent of Teachers Responding				
	Excellent	Very Good	Good	Fair	Poor
Cafeteria Appearance	16	25	37	17	0
Speed of Service	12	27	35	17	2
Food Attractiveness	9	19	39	20	7
Taste of Food	8	17	38	26	5
Variety of Food	11	24	33	15	11
Temperature of Food	8	14	28	29	14
Preparation of Food	3	22	29	28	10
Cleanliness of Cafeteria	9	29	29	19	8
Attitude of Servers	11	21	33	13	16

TABLE 4.--Number of Menu Items Served and Selected Overall in the Seven Centers During a One-Day Period

Meal	Number of Menu Items Available Overall	Number of Menu Items Selected Overall	Menu Items Most Frequently Selected
Breakfast	16	14	Eggs Meat (Bacon, Sausage, or Ham) Bread Fruit or Fruit Juices
Lunch	54	18	Meat Potatoes Bread Milk Dessert
Dinner	43	19	Meat Potatoes Bread Milk

Sample Meals Served and Selected for Each of Three Meals in a Day by X Center

Meal	Meal Served	Menu Items Selected*
Breakfast	Eggs	Eggs (2)
	Sausage or bacon	Sausage or bacon (2)
	Hot or cold cereal	Hot or cold cereal
	Pastry	Pastry
	Fresh or canned fruit	Fresh or canned fruit
	Milk	Milk
	French toast	
	Fruit cup	
	Juices - sweetened	
	Tomato juice	
Lunch	Fried chicken	Fried chicken
	Oven brown potatoes or mashed potatoes	Oven brown potatoes or mashed potatoes
	Dressing	Dressing
	Bread	Bread (2)
	Milk	Milk
	Salmon steaks	
	Cabbage rolls	
	Beets	
	Corn	
	Carrots	
	Tossed salad	
	Jello fruit salad	
	Bean salad	
	Cottage cheese salad	
	Mixed fruits	
	Juice - sweetened	
	Strawberry shortcake	
	Ice cream bars	
Dinner	Chili or grilled cheese sandwich	Chili or grilled cheese sandwich
	Bread	Bread (2)
	Milk	Milk
	Liver and onions	
	Mashed potatoes	
	Corn	
	Tossed salad	
	Bean salad	
	Mixed fruit	
	Ice cream	

*Menu items selected by 50 percent or more of corpsmembers in the survey.

TABLE 5.—Overall Analyses of Three Meals Selected in a Day by 270 Corpsmembers (According to the Four Food Groups)

Meal	Percent of Corpsmembers Who Selected Well-Balanced Meals*
Breakfast	34
Lunch	36
Dinner	29
TOTAL	33

*Percent of corpsmembers who selected a serving from each of the Four Food Groups at one meal.

Four Food Groups

Milk
Meat
Fruit and Vegetables
Breads and Cereals
Other Foods (Fats and Sugars)

APPENDIX B

REVIEW OF THE LITERATURE ON TEENAGE FOOD HABITS

REVIEW OF THE LITERATURE*

Teenage Food Habits in the U.S.

The belief is currently held that many teenagers have perilous food habits and are on the brink of nutritional disaster.[1] Adolescents are known to have marked preferences for uncommon food patterns. Heunemann et al.[2] reported their subjects ate breakfasts consisting of pork chops, watermelon, and salami and cheese sandwiches, or lunches consisting of potato salad and sunflower seeds. During one 7-day period, many of the subjects snacked constantly in lieu of eating a single meal. This same study found that males ate larger amounts and females ate smaller amounts of dairy products, vegetables, and fruits, and girls frequently skipped breakfasts. All groups of students consumed large amounts of the meat and legume foods.

Walker et al., studied acceptance of fruits and vegetables by teenagers. They found that teenagers prefer fruits over vegetables. They like the texture of raw fruits and vegetables over the cooked and processed forms and the sweet tasting over the tart or bland.[3]

*Most studies on teenage food habits were conducted in the 1960's. This literature review reflects this fact.

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[1] Coatney, Barbara. *Food Habits and Dietary Practices of Young Adults Including Food Fats, Fallacies and Nutrition Quackery.* Thesis. Texas Woman's University, 1974.

[2] Huenemann, R.L., Shapiro, L.R., Hampton, M.C., and Mitchell, B.W. "Food and Eating Practices of Teenagers." *Journal of the American Dietetic Association*, July 1968, pp. 17-24.

[3] Walker, M.A. et al. "Fruit and Vegetable Acceptance by Students." *Journal of the American Dietetic Association,* 62(1973), p. 268.

Shuck[4] studied food likes and dislikes. One hundred and eighteen South Dakota college students were asked to indicate their attitudes toward a list of 61 foods. The only vegetable liked listed by 90 percent of the students was corn. Strawberries, peaches, apples, and oranges were the best liked fruits.

Few differences exist between teens of various ethnic groups. Snacking has become a way of life for all teenagers. One study found soft drinks, candy, and potato chips to be the most frequently consumed snacks.[5]

Differences do exist in teenage food habits at different socio-economic levels. Walter found that where incomes are low, cheap energy foods, such as grains, completely dominate consumption patterns.[6] Shuck and Tartt looked at food consumption in low-income, rural, black families in Mississippi. Meats and grains were the principal contributors to the caloric values of foods used. Fat represented over 40 percent of the total calories.[7]

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[4] Shuck, Cecilia. "Food Preferences of South Dakota College Students." Journal of the American Dietetic Association, 39 (December 1961), pp. 595-597.

[5] Van Laningham, E. "A Comparative Study of Snacking Habits of Two Groups of College Women." Ph.D. Dissertation, Texas Woman's University, 1971.

[6] Walter, John. "Two Poverties Equal One Hunger." Journal of Nutrition Education, 5 (April/June 1973), pp. 129-133.

[7] Shuck, Cecilia and Tartt, June. "Food Consumption of Low-Income, Rural Negro Households in Mississippi." Journal of the American Dietetic Association, 62 (February 1973), pp. 151-155.

Nutritional Needs of Teenagers

Adolescence is a time of rapid physical growth rate, second only to the prenatal and infancy period. Teenage boys need approximately 3,000 calories each day, while girls need about 2,100 calories. Nutrient needs are much the same for males and females except girls require less protein.

Teenage girls taking oral contraceptives have a greater need for certain nutrients. Recent research shows an increasing correlation between vitamin deficiencies and the use of the pill. Increased need for thiamine, riboflavin, vitamins B_6, B_{12}, C, and folic acid is found in women using the pill.

Adequacy and Inadequacy of Teenage Diets

In the Health and Nutrition Examination Survey (HANES) of the National Center for Health Statistics, adolescents in low-income ratio states generally had lower nutrient intakes than did adolescents in high-income ratio states. Black adolescents tended to have the lowest nutrient intakes and white adolescents had the highest. This was true of all nutrients except vitamin A for which Spanish-Americans in low-income ratio states had the lowest values.[8]

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[8] National Center for Health Statistics, Preliminary Findings, First Health and Nutrition Examination Survey, United States, 1971-1972, DHEW Pub. No. (HRA) 74-1219-1, Health Resources Admin., Public Health Service, USDHEW, January 1974.

The belief that all teenagers are on the brink of nutritional disaster is not accepted by all. Some feel that not all adolescents are a homogenous group and it is a mistake to consider them in this manner when analyzing their nutritional status. Jean Mayer, noted nutritionist, states that "lack of good nutrition is not necessarily due to the pizzas, frappes, and hamburgers that teenagers eat; it depends on how much of these foods they consume in relation to what else they eat."[9]

Many are now finding that snacking contributes to the adequacy of teenage diets. Wharton feels that if snacks contribute more than 20 percent of the day's calorie intake, this diet may be more adequate in all nutrients except vitamins A and C than a diet eaten during the course of three traditional meals.[10]

A common type of teenage malnutrition today is overnutrition and obesity. Results of various obesity studies have shown that obesity is a common medical problem among adolescents. Approximately one-half of these obese teenagers develop their obesity during puberty. Followup studies have indicated that when obesity remains unchecked, the problem becomes more severe and more difficult to correct.[11] More teenage females than teenage males are overweight.[12]

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[9] Mayer, Jean. "White House Conference on Food, Nutrition, and Health." Journal of Home Economics, 61 (September 1969), pp. 499-502.

[10] Wharton, Mary. "Nutritive Intake of Adolescents." Journal of the American Dietetic Association, 42 (April 1963), pp. 306-309.

[11] Hammar, S.L. "Adolescent Obesity." Nutrition News, 27 (October 1964), p. 1.

[12] Coatney, B.

The key factor in teenage obesity is not exclusively overeating. Studies have shown that the overweight teenager may be consuming fewer calories than the teenager of normal weight, but that inactivity causes much of the obesity.

Leverton states that "there is no research evidence to indicate that frequent eating per se is detrimental to health. Frequent eating of only empty calories or that leads to excessive food intakes would be detrimental."[13]

Influences of Teenage Food Habits

A variety of influences aid in food habit development. Eating habits are greatly determined by one's culture, as well as by the availability of food. A culture has a very important influence in shaping the food habits of a community. Cultural patterns reflect the economic poverty or prosperity of a region. Even if economic situations change, the cultural patterns of food remain the same.

Abundant evidence from animals suggest that food habits established in infancy and early childhood are likely to persist throughout life. Children who are exposed to a wide variety of food with varying tastes and textures can accept change in food habits with little difficulty.

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[13] Leverton, Ruth. "Facts and Fallacies About Nutrition and Learning." Journal of Nutrition Education, 1 (Fall 1969), pp. 7-9.

The authoritative influence most often mentioned in the development of children's eating habits is the mother.[14] In fact, interviews with Illinois teenagers indicate their belief that parents should set an example with proper eating habits.[15]

The commercial advertising of food products in the United States has had a drastic effect on youth consumption patterns. Many of these ads are geared to young people.

Today, more than ever, there are more opportunities to select poor food because of the broad array of new foods available. Convenience foods have become a fact of modern life.

Nutrition Education for Teenagers

Various studies have indicated that the acquisition of knowledge relative to nutrition does not necessarily mean a change in food attitudes or practices. A USDA project to develop a nutrition curriculum for students in grades kindergarten through 12 showed significant gains in nutrition knowledge at all grade levels. However, there was no overall significant, positive, or negative effect on students' practices and attitudes toward food.[16]

Osman suggests that maybe knowledge, attitudes, and practices are not as simplistically related as we once thought. "Nutrition education programs have been going on in our schools for nearly 30 years. Why are not nutritional practices more commensurate with the programs provided?" Bonan states further that in contrast to educational experiences, the content of television commercials is not only retained longer, but has a more potent effect on our behavior. The ultimate goal of the advertising industry is to expose the product often enough to motivate consumers to purchase the product. Advertisers are not interested in increasing intellect but in increasing sales. In contrast to education, ads do not explain, they motivate action by creating a need for the product.[17]

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[14] Coatney, B.

[15] Spindler, E.B. and Acker, G. "Teenagers Tell Us About Their Nutrition." Journal of the American Dietetic Association, 43 (September 1963), pp. 228-231.

[16] O'Brien, R., Bickel, A., Gross, S., and Frankel, S. A Comprehensive School Foodservice Related Nutrition Education Curriculum Evaluation Project. Grades K-12. Final Report. U.S. Department of Agriculture, Washington, D.C., December 1976.

The 1971 National Nutrition Education Conference opened by saying,

> . . . motivation is equally as important as nutrition education and offers a problem that is even more difficult to solve. . . some people obviously are malnourished because they can't afford to but the necessary food; this is an economic problem. Some people are malnourished even though they have the money; they don't know what to buy. This is an educational problem. But many people are malnourished even though they have the money and know what to buy; they just don't care about good nutrition. This is a motivational problem. Attacking it may well call for dramatic new approaches in the years ahead.18

The formula for motivating teenagers to improve their nutrition presented by Spindler included 1) understanding the age group, 2) basing the approach on the needs and wants of the teenager, and 3) involving them in solving their problems.[19]

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[17] Bonan, Jack D. "Nutrition Education: Too Much, Too Little or Too Bad?" Journal of School Health, December 1972.

[18] "Nutrition Education for Youth." Journal of Home Economics, 64 (February 1972), pp. 34-38.

[19] Spindler, E.B. "Motivating Teenagers to Improve Nutrition." Journal of Home Economics, 55 (January 1963), pp. 28-32.

Schools in Virginia are involving students in efforts to build better lunch programs. Four Virginia schools took part in a national recipe-testing project. Students were asked to evaluate a series of specially prepared menu items. A student committee helps with taste-testing and lunch planning at a school in Indiana. "Students accept new foods more readily if they are involved in the decisionmaking."[20]

Curriculum planners developing a nutrition education program in Colorado asked students what they wanted to learn. Some students said that they hate proteins and vitamins and wanted the teacher to talk about bread and beef. Others indicated that they wanted the teacher to "give us the facts and let us decide to do it our way" instead of being told what to eat. The athletes wanted to know what they could eat to keep from becoming nauseated. Overweight youths were interested in dieting and losing weight.[21] All of the students were interested in their own health.

Teenagers often are not given credit for their ability to contribute to meal planning. Oftentimes their needs are only assumed. At the 1971 National Nutrition Education Conference, one teenager responded, "What is made available for us for snacks? Mostly sweets. Snacks could be one of the best shortcuts to good nutrition in the United States." Another teen suggested putting nutritional messages on napkins at school such as "Did you drink your milk today?" Another said that comic books with nutritional messages are a good idea.[22] Teenagers have repeatedly suggested that we should make good nutrition a fad.

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[20] "Lunches Kids Like." Food and Nutrition, 7 (August 1977), p. 5.

[21] MacReynolds, J. "Can Teaching Good Nutrition Be Bad?" Journal of Nutrition Education, Summer 1970, p. 14.

An experiment in changing food habits in the types of foods sold through vending machines and concessions was tried in six secondary schools. No special attempts were made to educate. Introduction of an apple vending machine led to a 27 percent drop in chocolate bar sales. Replacement of candy and candy bars by nuts, seeds, and grain products led to a 23 percent drop in vending machine sales. Introduction of milk to schools that had previously sold only pop led to a 42 percent drop in pop sales.[23] Other reports have indicated that when nutritious foods are offered to young people, they will select them.

At the 1971 National Nutrition Education Conference, youths responded to the question of how to motivate teenagers to better food habits.

> Youth is helped by someone who respects him as a person, who lets him know he is liked, who listens and therefore understands him, who is fair and firm, who is capable and works with him allowing him his freedom and independence, allowing him to gauge his intelligence and his energies, and providing him an opportunity to make his own decisions.24

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[22] "Nutrition Education for Youth."/

[23] Crawford, Louise. "Junk Food In/Our Schools? A Look at Student Spending in School Vending Machines and Concessions." Journal of the American Dietetic Association, 38(3) (July 1977), pp. 193-197.

[24] "Nutrition Education for Youth."

AN EVALUATION OF A PILOT WEIGHT CONTROL PROGRAM

TONGUE POINT JOB CORPS CENTER
ASTORIA, OREGON

Dorothy Culjat

Office of Youth Programs
Report Number 17

February 1979

OVERVIEW

Obesity is a major health problem of Job Corpsmembers. Female enrollees are most often overweight relative to their age, height and frame. This demonstration project in a single Job Corps center attempted to address this problem. The sample was limited and the resulting weight losses among participants were modest. Some of the difficulties and solutions of weight loss programs are identified. It appears that obesity will not be easily overcome. In a broader sense, this study suggests the kinds of demonstration and testing efforts which are possible within the controlled Job Corps environment. Job Corps offers a laboratory for learning how to solve the multiple problems of economically disadvantaged youth.

ROBERT TAGGART
Administrator
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ACKNOWLEDGEMENTS

I would like to take this opportunity to thank John Crosby, Director, Life Skills Program, and Ataa Akyeampong, Head Counselor, Tongue Point Job Corps Center, for allowing this pilot weight control program to be introduced and implemented at the center. Without their approval and enthusiastic support, this project would not have been possible.

At the same time, I would like to express my deep appreciation to Dan Annett, Counselor, and Cindy Stoffel, Resident Advisor, for their willingness to co-teach the weight control program. Their dedication to and interest in the well-being of the corpswomen who participated in the program was evident throughout.

Lastly, I would like to acknowledge those corpsmembers whose participation in and receptiveness to the program made it very worthwhile.

INTRODUCTION

Obesity is widely considered a major health problem with medical and psychological implications as well as economic and social consequences. It is estimated that by one measure or another as many as 25 per cent of American adults are either overweight or obese. Approximately 15 to 20 per cent of all teenagers in America are obese (Mayer, 1968). If, as seems likely, these same percentages can be applied to the Job Corps population, then approximately 4,500 enrollees may be seen as in need of or potential users of a weight reduction program.

In addition to those individuals who are already overweight and/or obese upon entering Job Corps programs, the Guthrie Job Corps Center for Women has documented cases of previously normal weight corpswomen who became overweight or obese during their stay at the center. In April, 1978, Mary Jane McGoodwin, Portland Job Corps Center nurse, conducted a random check of corpsmembers' weights. Of 15 corpsmembers weighed, six (40%) had gained weight since enrolling in Job Corps. Weight gains ranged from 2 to 45 pounds (see Table 1).

Obesity represents a major obstacle to securing employment. As stated in the Guthrie report,

> In some jobs, obesity presents unacceptably high risks to personal safety to permit employment. In others, job requirements involving physical dexterity ...limit or prohibit employment of an unusually obese individual. Certain health occupations in which the employee must be able to assist in patient ambulatory efforts, and in other activities be able to physically support and protect patients, must eliminate the obese from employment consideration. Employers cannot obtain insurance coverage for obese employees as easily as they can for other individuals.

In addition, the social stigma attached to obesity greatly influences employers. In the United States, obese individuals have come to be viewed

Table 1

Random Check of Corpsmembers' Weights*

SEX	RACE	ADMISSION WEIGHT	PRESENT WEIGHT	GAIN	LOSS
M	W	Aug. 76 - 174#	April '78 - 179#	5#	
F	B	Nov. 76 - 153	April '78 - 164	11	
M	W	Nov. 76 - 191	April '78 - 183		8#
M	B	Nov. 76 - 157	April '78 - 169	12 (Height gain 1-½")**	
F	B	Mar. 77 - 162	April '78 - 162	0	0
F	W	Mar. 77 - 209	April '78 - 254	45 (Food Service)	
M	B	Nov. 77 - 164	April '78 - 159		5
M	W	July 77 - 177	April '78 - 183	6 (Height gain 1-½")	
F	W	July 77 - 138	April '78 - 135		3
F	B	Oct. 77 - 117	April '78 - 117		0
F	Aka.I.	Aug. 77 - 114½	April '78 - 137	22½	
M	Mex.	July 77 - 164	April '78 - 173	9	
F	B	Jan. 78 - 183	April '78 - 176		7
M	W	Jan. 78 - 161	April '78 - 172	11	
M	W	Jan. 78 - 133	April '78 - 133		0
M	W	Jan. 78 - 141	April '78 - 148	7	
F	W	Jan. 78 - 120	April '78 - 122	2	

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*Portland Job Corps Center

**Not included in report of weight gains as aesthetically unsightly and are seen by many as self-indulgent gluttons lacking in willpower and self-control. Thus the overweight or obese Job Corps graduate may find himself/herself highly skilled but still unemployable.

Crowley (1976) aptly described the discrimination of the overweight and obese in the labor market:

> Many jobs and professions require normal or nearly "ideal weight" as a criterion for employment. Commercial airlines require all flight personnel to maintain near normal weight. Many state, county and local police officers must control their weight, excess fat in some cases cause for suspension...It is interesting to note the physique of the numerous presidential candidates. No obese person has been a serious contender in modern times.

According to a Wall Street Journal (1973) article concerning obese individuals and the job market, one in three overweight persons in the national Diet Workshop weight control organization reported having experienced job bias due to his/her being obese. Some companies refuse even to interview obese individuals while others insist upon a physical exam which obese persons cannot pass. Crowley observed that a "very real and hurtful financial loss for the obese person in the American labor market is lack of promotion, as well as unlikelihood of securing a better-paying job."

Obesity has medical, economic, psychological and social implications for many individuals including Job Corps enrollees. Based on the above findings, it would appear that weight reduction can have favorable effects, both curative and preventive, as well as an economic impact on career opportunities and lifetime earnings for Job Corps graduates.

Likewise, based on informal observations at a number of centers (Bickel, 1977), it became clear that a weight control program would serve a vital function in any Job Corps center. Such a program would be aimed at

1) training the already obese corpsmembers in weight reduction techniques and 2) teaching normal weight corpsmembers how to prevent weight gain both during Job Corps enrollment and in adult life.

Treatment of obesity and weight reduction are subjects of enormous medical and popular interest. Traditional approaches to treatment fall into three primary categories:

1) General medical management which emphasizes "dieting" and often includes prescription drugs such as amphetemines and diuretics;
2) Psychiatric and psychotherapeutic treatment in which obesity is seen as a symptom of emotional problems;
3) Self-help groups such as Weight Watchers, Overeaters Anonymous, and TOPS which provide social support and nutrition information.

There has been little evidence that these three approaches are effective in fostering permanent weight loss among significantly obese persons. The observation of many professionals who treat obese persons is that the individuals lose weight, often with little difficulty, only to regain it after the "diet" is terminated and the relationship with the physician, therapist or group is no longer available (Armstrong and Booth, 1976). It is clear that these traditional approaches do not provide obese individuals with skills for changing eating behavior. Without these skills, enduring weight loss cannot be achieved.

In essence, an effective weight loss program must be a behavior change program in which individuals acquire new skills for managing weight-related habits, primarily eating behavior and physical activity.

In light of the above, a pilot weight control program based on principles of behavior change was developed and implemented at the Tongue Point Job Corps Center, Astoria, Oregon. The program utilized an educational approach

PROGRAM DESCRIPTION

The program, developed by two health education consultants in Region X, was a behavioral-based approach to the treatment of obesity and was essentially a re-education process whereby appropriate eating behavior is learned and inappropriate eating behavior is hopefully eliminated. Many of the components found in behavior modification weight control programs were employed: 1) self-monitoring (recording) of body weight and food intake; 2) environmental control procedures; 3) goal setting; 4) nutritional and educational counseling; 5) contingency contracting; 6) self-reward, and 7) social reinforcement in the form of instructor and group support.

A program manual consisting of seven lessons plans was developed to guide the instructors conducting the course. Four books served as resource texts to the program. These included *A Diet for Living*, J. Mayer, 1975; *Take It Off and Keep It Off* , Jeffrey and Katz, 1977; *Eating is Okay*, Jordan, Levitz and Kimbrell, 1976, and *Act Thin, Stay Thin*, R. Stuart, 1978. A weight control program kit was assembled which, in addition to the instructor's manual and texts, included a Borg scale and sufficient materials required for each session for fifteen participants. Corpsmembers were provided with folders in which to keep eating diaries, weight change graphs, behavior change checklists, self-reward contract forms and other materials. Although not originally included in the program, upon the suggestion of the instructors, hand-out sheets reviewing each lesson were developed to be distributed to corpsmembers at the end of each session.

The program was introduced to the counseling staff of the Tongue Point Job Corps Center in March, 1978. Two staff members elected to co-teach the course. One instructor, a counselor, had an M.S. in general experimental psychology and had previous experience in a similar program designed for college students. The other instructor, a resident advisor, had a B.S. in psywhereby the corpsmember is viewed as a student studying his/her own behavior and is taught new skills for managing eating and physical activity. Emphasis was on slow, gradual weight loss.

The purpose of this report is to evaluate the effectiveness of the pilot weight control program. Since its implementation in May 1978, the program has been offered three times. In total, 33 corpsmembers have participated. This report describes the results of the first program.

It is hoped that the findings described in this report will be of programmatic interest to the National Health Office and will provide a basis upon which better decisions can be made as to how to assist centers in preventing weight gain and facilitating weight loss among Job Corps enrollees.

chology and an avid interest in nutrition.

The program consisted of 7 weekly 1-hour sessions. Each session had specific objectives and planned activities. Lectures, activities and group discussions throughout the program focused on recording food intake and habit awareness, controlling environmental cues to eat, nutrition counseling, increasing physical activity, setting realistic goals and self-reward, and reinforcing and maintaining behavior changes. An enrollment limit was set at 15 participants.

During the orientation meeting (session one), an explanation was given to all interested corpsmembers of what a behavioral weight change program is--its unique characteristics and how it differs from other weight loss methods. In addition, they were asked to record their food intake for a week in order to decide better whether or not they could follow this program.

In session two, participants explored how their attitudes, beliefs and cultural patterns influence their eating habits. They were asked to continue recording their daily food intake in order to obtain a baseline of their normal eating behaviors.

In the third session, corpsmembers examined environmental cues which trigger eating and/or overeating, analyzed their eating habits and began to identify problem eating behaviors. Three "behavior change projects" were introduced to help participants reduce the impact of the environmental signals to eat. These included 1) scheduling eating times, 2) limiting eating places, and 3) practicing eating without any distractions. Each corpsmember was given a checklist to keep a record of his or her daily progress in changing the assigned behaviors.

Nutrition information as it relates to weight reduction and control was provided in the fourth session. There was opportunity for discussion of the three behavior change projects and a fourth project was introduced, that of doing one thing each day to reduce the amount of food eaten. Center menus for the following week were distributed to facilitate recording food intake. Increasing physical activity was the general topic for the fifth session. Participants were assisted in identifying ways to increase their energy expenditure in their daily routines. They were encouraged to incorporate into their daily living patterns exercise considered both safe and enjoyable. A fifth and final behavior change project, walking a minimum of 15 minutes each day, was introduced.

In the sixth session, participants reviewed their progress for each behavior change and were taught how to set realistic goals and to use self-reward to reinforce positive eating and exercise behaviors. The seventh and last session was devoted to a review of the program and a discussion of specific strategies for maintaing appropriate behavior changes and weight loss.

Weights of participants were recorded at each session. The sessions were held in a room with comfortable chairs away from distractions to avoid possible interruptions.

Participants who completed the program was awarded certificates and special buttons which proclaimed "I WON! I LOST!" so as to give recognition.

CONDUCT OF THE PROGRAM

This project used a nonexperimental one group, pretest, posttest design. The 7-week weight control program, using behavior modification-based techniques was considered the treatment or independent variable. Participants' initial weights recorded at the program orientation (session one) served as the pretest measure while their weights recorded at the final session were the posttest measure. Given the nature of the center's environment (group living, openness, absence during home leave, turnover, etc.), a design with controls was not feasible. Nevertheless, this project was developed and implemented to provide a preliminary look at the effectiveness of the pilot weight control program.

Notices of the weight control program were posted around the center and in dorm lounges and announcements were made by R.A.s at dorm meetings. The counseling staff took an active role in informing other center staff of the program so as to gain support for and potential referrals to the program.

In order to register for the program, prospective participants were required to attend an orientation meeting (session one) where the course outline was explained by the instructors. Enrollees who were interested were weighed and given a food diary to be completed during the following week. Recording food intake for one week was a prerequisite for admission into the program. During this week, individual interviews were conducted as an additional screening measure.

The participants in the pilot program were 15 of 21 corpswomen who attended the orientation session. Six corpsmembers decided not to participate after the first week. Individuals' weights were recorded at each session. The initial weights of the 15 participants ranged from 125 to 230 pounds, with a mean weight of 171.3 pounds. Eleven corpswomen listed their goal weights.

For these eleven, the mean number of pounds overweight was 50.7 pounds, with a range from 23 to 86 pounds. The ages of all fifteen corpswomen ranged from 17 to 21 years with a mean age of 18.5 years.

RESULTS

Of the fifteen corpswomen who elected to participate in the program, nine completed the course. This gives an attrition rate of 40%. Weight change data is reported only for those nine corpswomen who completed the program. The initial weights of the nine corpswomen ranged from 125 to 206 pounds, with a mean weight of 162.8 pounds. At the end of the seven-week program, the mean weight recorded for these participants was 160.0 pounds, indicating a mean weight loss of 2.8 pounds. Of the nine, seven loss weight (weight loss ranging from 1 to 8 pounds) whereas two gained weight (3 and 4 pounds respectively). (See Table 2)

DISCUSSION

The short-term goal of the pilot weight control program was that each participant would achieve a weight loss of 5 pounds at the end of the program. Setting an attainment level of weight loss at 5 pounds as a major goal of the program may not have been realistic given that weight change measured in absolute pounds is a biased measure which favors those who are more overweight and thus have more to lose. Nevertheless, at the end of the program, the average weight loss of the nine corpswomen was 2.8 pounds and four corpswomen did lose 5 or more pounds.

Table 2

Weight Changes for 9 Participants Completing Pilot Weight Control Program*

Tongue Point Job Corps Center

CASE	AGE	HEIGHT	INITIAL WEIGHT	GOAL WEIGHT	SURPLUS WEIGHT	END WEIGHT (7 weeks later)	TOTAL CHANGE
1	19	5'6"	172	142	30	176	+ 4
2	19	5'4"	181	133	48	174	- 7
3	19	4'11"	125	98	27	124	- 1
4	19	5'4"	206	145	61	198	- 8
5	18	5'7"	147	124	23	150	+ 3
6	17	5'2"	201	115	86	199	- 2
7	16	5'1"	130	105	25	127	- 3
8	17	5'1"	135	110	25	130	- 5
9	21	5'3"	169	120	49	162	- 7

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*Reported in pounds
Participants were corpswomen who attended at least 6 sessions

Obviously, without a control group, it is not possible to say with certainty that weight loss resulted from participation in the pilot program; however, in terms of program outcomes, the results are encouraging and indicate that participation in a structured weight control program such as this pilot project can be a first step toward achieving weight loss.

The drop-out rate (40%) is not at all discouraging given that a range of 0 to 83% is reported in the literature (Hagen, Foreyt and Durham, 1976).

Ideally, a longer program with follow-up is necessary but it is not certain whether this is feasible given turnover, home leaves, etc. within the Job Corps setting. At the present moment, the Tongue Point Job Corps counseling staff is conducting a program on a drop-in basis similar to community programs such as Weight Watchers and TOPS. This may be a more cost-effective and practical method of conducting a weight control program in that it reduces administrativ costs of interviewing and screening.

That corpsmembers are interested in weight control is certain. Personal history forms were distributed to all fifteen participants. Of these, eleven were completed and returned to the instructors. When asked to "Tell why you would like to lose weight at this time or keep from gaining weight," responses included personal, health and job-related reasons. Three corpswomen were concerned that their present weight would prevent them from being accepted into specific training programs. Two mentioned their inability to be active and mobile as factors contributing to their desire to lose weight. All respondents indicated feelings of low self-esteem associated with obesity and/or overweight. Typical responses were: "Because I feel uncomfortable; my appearance is just looking awful;" "I would like to build up my self-confidence;" "So I can feel better about myself, and if I lose weight, I will have a better chance of getting the type of job I want;" and I need to lose weight because of job qualifications and because it's affecting my health both men and physically."

Low self-esteem may also be reflected in the fact that seven of the corpswomen who completed the questionnaire indicated that they had always been overweight as long as they can remember. Two of the seven had gained even more weight after coming to Job Corps. Two other corpswomen felt that their weight problems took place only after enrolling in Job Corps. Only one corpsmember indicated that she was interested in preventing weight gain from occurring in the first place.

It is a known fact that many youths come to Job Corps with low self-esteem. Feelings of being successful are often lacking even with weight reduction efforts. All eleven corpswomen had tried to lose weight before with little or no results. Those who had lost weight quickly. Given that corpsmembers did lose weight, it is clear that participation in a structured weight control program such as this pilot project, can be a means by which corpsmembers achieve small successes in changing behaviors and losing weight and thus increase self-esteem.

A program evaluation questionnaire was distributed to participants. Responses were very positive. All corpsmembers who returned the questionnaire felt that the program was worthwhile. When asked how the program had been helpful, most participants reported that it had made them aware for the first time of their problem eating behaviors and situations. Awareness is often the first step in behavior change. Several others remarked that their diets were more balanced; others suggested a program specifically designed to help them increase their physical activity.

An effective program for achieving weight control would attract and retain participants, assist them in losing weight and enable them to maintain weight loss at minimal expense of time and money. An additional desirable feature of an effective weight control program would be that it help participants develop skills to control eating and increase physical activity. The outcomes of this pilot project indicate that it meets the minimal requirements. It is suggested that a cursory 6-month follow-up evaluation be conducted to as-certain how many participants are still enrolled in Job Corps, how many have continued to lose weight and to determine what appropriate eating behaviors are being practiced as a result of having participated in the program.

It is recommended that the counseling staff present the results of this pilot project to Center staff and seek their participation in reinforcing weight reduction efforts among Job Corps enrollees. It is important that the present efforts in weight reduction not be isolated. There needs to exist a shared focus and coordination of resources and services among different departments at the center if weight reduction efforts and behavior changes in eating habits and physical activity are to be increased.. While responsibility for change ultimately rests with each corpsmember, the Center can make a concerted effort to facilitate the change. The pilot weight control program offered by the counseling staff represents the first step.

RECOMMENDATIONS

The following recommendations were suggested by the Tongue Point Job Corps Center counseling staff. Should the program be continued or initiated at another center, it is advisable that these recommendations be implemented for they provide the basis for ongoing improvement of the program. Where appropriate, I have added comments and/or suggestions to those already made.

1. The RATE of eating was covered too briefly in the current weight control program. This subject needs more emphasis perhaps in the form of a practice project. (Specific intervention techniques can be employed to slow one's rate of eating. They include using chopsticks, putting down one's eating utensil between bites, counting to 20 between bites and purchasing and using a Water-Pik bite counter.)

2. The length of the sessions should be increased to one and one-half hours. The logistics of a session take a considerable amount of time and leave too little time remaining for the essence of the session. Also corpsmembers' enthusiasm and support of each other during the weigh-in are important.

3. The program could be lengthened. Currently, it is seven weeks. Perhaps ten weeks would be better. Other programs such as Weight Watchers, use 10-week programs. Since habit-changing is introduced in the third week, a longer reinforcement period is needed.

   Another suggestion would be to keep the seven-week basic program, but have follow-up sessions. Undoubtedly, some continuation is absolutely necessary. (I would agree that continuation or follow-up is absolutely necessary. Is it possible, however, in the Job Corps setting?)

4. Use graduates of the program as assistants in either primary groups or follow-up groups or both. They can serve as models, positive reinforcement, and sources of suggestion. They could possibly be participants in follow-up groups and trainees in primary groups. It would be important to use the same person in one 7-10 week groups, as it would be disruptive to constantly change trainees. Having one person would help build up the trust level within the group. (A graduate of the first program served as an assistant for the second program.)

5. Screening procedures need revision. After the initial orientation session, set up individual appointments and, through interviews, determine an individual's commitment, attitude, probable attendance (discover whether they are due for home leaves, etc.), and percentage overweight. In this way, screening and "de-selection" are done before the group begins. Also, being selected from a larger group may lend a slight, competitive air to the weight control program and corpsmembers may value the group more, perhaps improving their attendance and motivation.

6. Limitations on group size are needed--either relatively small groups or a large group broken down into smaller groups. Possibly, interested corpsmembers should be divided into three groups:

    a. Basic weight control group
    b. Follow-up group
    c. Maintenance group including corpsmembers who are not overweight but fear weight gain; those who have completed a weight loss program, such as TOPS, Weight Watchers, etc., and wish to maintain their weight; anyone who wishes to learn weight control skills. This group could serve as a preventive measure as well as maintenance enforcer, and, as a sidelight, it may attract more men into the weight control program.

   (As with any program such as this in the Job Corps setting, success in implementation depends, in large part, on the efforts of the staff and the time they have available).

7. Revisions should be made to the weight graphs. Ideally, graphs should reflect increases as well as decreases in weight. Also, instead of indicating an individual's actual weight at the top of the chart (for all to see!), perhaps the chart should start at 0 and mark ups and downs in weight. The person's actual weight should be a private matter.

8. Strategies for use when the corpsmember is on his/her own should be provided. Assertiveness training to aid in dealing with temptations is an important feature of a weight control program. Also, methods of manipulating the natural environment and an individual's behavior aid in maintenance of weight loss over a long period of time.

9. More adequate nutritional information is needed. Instead of eating certain foods because they are "good for you", corpsmembers should learn about what can happen when one is deficient in good dietary practices, etc. Some sort of calorie-counting system is also advisable to make individuals aware of the relative caloric content of foods.

10. Regarding menus...at Tongue Point we are using incomplete menus which only list the entrees, so corpsmembers are writing on the menu what they are actually eating rather than merely circling the food items.

11. The behavior change project checklist needs to be revised to allow for more feedback on a daily basis. For example, it might be better to break each day down into time blocks to allow partial reinforcement for the period rather than reflecting a day of total defeat (punishment).

12. Base the weight control program more on Richard Stuart's book, Act Thin, Stay Thin, using his ideas on modifying faulty thinking patterns and his theories on moods, their relation to sleep cycles and ultimate effect on eating behavior. (This book was published just after the pilot project's development was completed. It was included as a resource text. The goal of the program was to offer a limited number of very specific behavior changes. Certainly, many of Stuart's ideas can be incorporated.)

13. Schedule meetings immediately prior to meals in order to allow participants to practice weight control techniques while still fresh in their minds. (This was implemented for the second program.)

14. Feedback on completed practice projects in the form of positive/corrective comments i.e. on behavior checklist forms, menus, etc. might serve a purpose within the program. (Again, how much time is available for individual counseling depends on the counseling staff's day-to-day workload.)

15. A class/instructor evaluation at the completion of the program could provide a valuable basis for continued program improvement. (This was planned for and subsequently provided.)

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EVALUATION STUDY OF JOB CORPS VOCATIONAL TRAINING CURRICULA

Jane Melton

Office of Youth Programs Report Number 18

February 1979

OVERVIEW

There are a range of excellent vocational materials which have been developed inside and outside of Job Corps. Vocational instructors in centers do not have the time or ability to review and assess these materials for their applicability. Hence, the Job Corps national office commissioned the following assessment which seeks to identify and rate available curricula in the nineteen major Job Corps training areas. This assessment could be useful to vocational educators and CETA classroom training operators who serve economically disadvantaged youth.

In fiscal 1979 and 1980, Job Corps will undertake a targeted effort to improve training and materials in those clusters which poor performance as measured by completion rates, placements, job-training models and wages. New materials will be tested.

ROBERT TAGGART
Administrator
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TABLE OF CONTENTS

Executive Summary.. 451

I. Introduction.. 455

II. Research Methodology.. 457

III. Findings.. 462

IV. Recommendations.. 469

APPENDICES

Appendix A: Evaluative Bibliography of Materials
- Introduction.. 477
- Index.. 479
- Bibliography..

Appendix B: Source Listing.. 723

EXHIBITS

1. Instructional Materials Checklist for Disadvantaged Vocational Students.. 472

2. National Network for Curriculum Coordination in Vocational and Technical Education.. 474

EXECUTIVE SUMMARY

This report was prepared by TEAM Associates, Inc., as a fulfillment of its contract with the National Office of Job Corps to conduct a search and evaluation of available curricula for nineteen vocational training courses. The report contains an introduction, a section detailing the research methodology, and a section devoted to findings and recommendations. The attached appendices contain specific findings and an item-by-item evaluation of materials. It is hoped that the appendices, especially the evaluative bibliography of materials, will be disseminated to regions and centers and will serve as an aid to locating the most effective curriculum materials available. Following are the preliminary findings from the search, and specific recommendations listed in a suggested order of importance when follow-up action is to be taken.

Findings

- Few usable printed materials are available. Over three hundred items were reviewed, and only one hundred and five were chosen for further evaluation. Most of the printed curricula examined did not meet criteria that had been established for materials suitable for use with the disadvantaged.
- Many sources of audio-visual materials seem to be available. In fact, one index contains over one hundred thousand listings of audio-visual producers.
- Curriculum research and development centers do exist and will provide much helpful information, as is documented in this report.

Recommendations

As a result of the preliminary findings from this search and evaluation of curricula, TEAM Associates recommends several follow-up steps which are listed below:

- That the Job Corps National and Regional Offices form task forces to develop curriculum kits in each vocational area. Content experts in each region could review materials located from a search as well as materials currently in use, to develop a more standardized, complete package.
- That Job Corps centers be provided with technical assistance in the most effective use of new curriculum materials. This assistance could be of special help to those instructors who are new to Job Corps, in addition to providing a standard for proper and effective use of the materials.
- That Job Corps centers should field test selected materials.
- That further study on the appropriate use of audio-visual materials should be performed. More criteria need to be set for effective use of audio-visuals.
- That Job Corps centers be provided with technical assistance in developing their own audio-visuals. For example, slide programs on correct task procedures could be developed.
- That the Job Corps National Office establish a data bank of existing materials in use at centers, and that the data bank be part of an overall program evaluation and monitoring system.
- That the research methodology be altered for future work efforts.

The rationale for these recommendations is contained in the last section of the report, "Findings and Recommendations."

I. INTRODUCTION

TEAM Associates, Inc., was contracted by the National Office of Job Corps, Employment and Training Administration, to conduct a search and evaluation of available curricula for nineteen vocational training courses. These courses were chosen for study as a result of positive placement statistics. The specific purpose of the search was to identify programs which meet the needs of Job Corps, to evaluate their effectiveness as learning tools, and to discuss their utility in terms of corpsmember training.

The search was performed in response to several related needs. A primary reason for the search is to continue to provide the most innovative and effective training to individuals who must develop strong skills in the vocational training areas under examination. The search has a potential time-saving value for Job Corps center vocational instructors. It is imperative that Job Corps keep abreast of new curriculum developments in vocational training. However, instructors whose primary responsibility is teaching often do not have time to contact publishers and review new materials. It is hoped that the evaluation of curricula appended to this report will be appropriately disseminated to the individuals whom the study was designed to assist - the Job Corps center vocational instructors and managers of training. It is also anticipated that this evaluation may be of special help to new center contractors in the start-up phase. A related reason for the search is that it may provide a further degree of standardization in vocational training course content at different Job Corps centers throughout the country. Currently, different contractors utilize curricula which vary in content, approach, and most importantly, in effectiveness. Too, standards for choosing curricula vary widely. Naturally, vocational training courses must be geared to suit the employment needs of the region, so that complete standardization would not be desirable or feasible. However, this study has established certain basic criteria for choosing course materials which can be applied in every Job Corps center and would ensure training effectiveness and impact across all programs. The information contained in the evaluation should provide general guidelines for selecting any other new materials. A final and very important reason for conducting the search is that it was performed as a result of a need expressed by vocational instructors throughout the regions. These instructors and managers voiced a desire for alternate curriculum materials which would be suitable for the majority of corpsmembers who are reading on a lower level than that contained in much of the current curricula. If such materials could be found, teachers could spend less time altering them to suit corpsmember needs and use the time for other instructional purposes.

This introduction has stated the rationale for the evaluation of materials in nineteen vocational training courses; the next section discusses research methodology. The section following contains findings of the search and recommendations. The attached appendices include summaries of pertinent data. The appendices were designed to be distributed to regions and centers. Appendix A is the evaluative bibliography of selected materials which are suitable for and available in the nineteen vocational areas. Appendix B provides a list of individuals and firms contacted during the search. Appendix C is the material gathered from the ERIC search.

II. RESEARCH METHODOLOGY

This section will describe the procedures followed in performing the search and evaluation of vocational training curriculum materials for nineteen selected courses. Procedures to be discussed include the following: needs assessment, source identification and review, and selection of criteria for evaluation of curricula.

A. Needs Assessment

In the initial phase of this endeavor, TEAM Associates conducted a needs assessment. This analysis was performed to insure that all efforts by project staff were responsive to the needs of Job Corps. Of course, many requirements, such as the need for high-interest/low reading level material, had been previously identified, but project staff critically examined all needs prior to beginning the search.

In order to gather more relevant data, a representative of TEAM Associates visited Keystone Job Corps center in Drums, Pa., to talk with vocational instructors and managers about their needs. Mr. Ed Heimbach, manager, Education and Training, along with instructors at Keystone, felt that the teaching/learning process would be more effective if more materials on a lower reading level could be located. The visit to Keystone helped identify some of the materials currently in use at Job Corps centers, and some current problems and needs with regard to curriculum.

B. Identification of Sources

The next step performed by TEAM Associates was the formation of contacts with vocational education programs and publishers (commercial and non-profit). TEAM Associates wrote, called, and/or interviewed many sources (see appendix B). Publishers' catalogs had to be obtained and reviewed; materials were then selected for first hand examination and evaluation.

C. Criteria Selection

Before materials could be evaluated, criteria for selecting them had to be established. Webster[1] has outlined a model for evaluating instructional materials which includes elements from the four basic evaluation frameworks accepted as the present state of the art: CIPP (1971), Scriven (1967), Stake (1967), and Provus (1971). The Webster model has provided evaluation guidelines for the study. TEAM Associates has followed this model as closely as possible, given the time frames. In brief, Webster's model focuses on context evaluation (information gained from basic and applied research and statistics obtained from prior use of the materials). Context evaluation, or needs assessment, has been performed by vocational instructors and TEAM Associates staff in diagnosing problem areas and identifying unmet needs. Certain general criteria, such as a low reading level for printed materials, and appropriate illustrations for young adults of difficult ethnic backgrounds, were central to the purpose of the evaluation. (For a complete list of criteria, see exhibit 1.)

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[1] William Webster, The Evaluation of Instructional Materials, Washington, D.C., Association for Educational Communications and Technology, 1976, pp. 2-6.

Regarding input evaluation, TEAM Associates has used applied research information, such as information on types of students served, and basic research information in the field of learning and development to help set the criteria for materials evaluation. Basic research has shown, for example, that students and teachers perform more effectively when specific performance objectives are presented at each step of the learning process. One weak input area is that of product evaluation information. TEAM Associates has gained verbal assurances that a particular program has met certain goals, but no data to verify the assertions have been presented. It can be assumed that substantiating data have not been systematically collected and analyzed.

A final area of input evaluation is that of cost and availability of materials. TEAM Associates can provide this information per item for most of the materials; to provide a total cost figure, more information will be needed on the number of centers which require the materials.

TEAM Associates has compiled the materials evaluation results on forms entitled "Instructional Resource Checklist for Disadvantaged Vocational Students" (see exhibit 1). This form was developed by the staff of the University of Maryland Vocational Curriculum Research and Development Center. Six experts in the fields of vocational-technical education and program evaluation designed the form in about two weeks. Due to lack of time needed to develop a valid evaluation instrument, TEAM Associates requested and received permission from the University of Maryland to use and modify this form. The form is structured so that teachers can readily compare existing materials with those in the bibliography, and can decide if the material would be suitable for use in a specific program. In addition, the form provides space for a detailed narrative description as well as recommendations for use. All materials included in the bibliography will be recommended as either "somewhat" or "highly" useful. In addition, the descriptions and comments include the following:

- Problem areas which might be encountered
- Suggestions on when and how to use
- Reading level, if available
- More detailed description of content and format

D. Search Limitations

Several limitations became apparent as work progressed during the search for curricula; they should be noted here. First, as mentioned previously, a full comparison of existing materials was not possible due to the lack of data regarding those materials currently in use. However, TEAM Associates did receive feedback from the regions during the training sessions which support conclusions resulting from first-hand examination of existing curricula.

Next, the time limit of the search was restrictive, considering the scope of the project. Some publishers did not respond for four to six weeks from the date of the letter. Many individuals were out of town or on leave for the summer. Too, the number of sources available for each vocation are numerous. For example, three pages of sources were obtained from the IBEW Contact. There was not time to follow up on these sources.

In addition, the NICEM index put out by the University of Southern California is a four-hundred-page-index with approximately four hundred listings of audio-visual producers per page. When audio-visual materials and printed materials for nineteen vocations are being evaluated, the scope of the work effort becomes enormous. And because of the many sources of materials, effective curricula may have been overlooked and not included in the evaluation. Thus the firms listed in the bibliography are by no means an exhaustive listing of good sources; this study has explored some of the available sources of curriculum materials. As a result of these limitations, this report and attached appendices should be regarded as a preliminary identification and evaluation of vocational training materials.

III. FINDINGS

Due to the innumerable number of sources of materials, these findings should be regarded as a preliminary survey of available curricula and instructional resources. Many good sources, especially in the audio-visual area, have not been identified due to time limitations. In this section we will discuss general and specific findings, and finally, make recommendations for further study in this area.

Resource Catalogs

The current major thrust in vocational education is in the development and dissemination of catalogs of performance objectives, criterion-referenced measures, and performance guides for use in structuring vocational courses. This effort was made possible through V-TECS, the Vocational-Technical Education Consortium of States.[1] V-TECS is a cooperative effort involving sixteen state divisions of vocational education, the Air Training Command, U.S. Air Force, and U.S. Naval Education and Training Command. Members are assigned particular course areas for catalog development. The Western Maryland Vocational Resource Center has catalogs available for dissemination.

More specifically, V-TECS is providing a base for the development of valid performance-based instructional programs. Such a program is designed to ensure that instructional content relates to the actual tasks performed on the job. There are three basic components of a performance-based instructional system: task analysis, performance objectives, and criterion-referenced measures.

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[1] All references to organizations are fully listed in appendix B.

Task analyses provide a means of identifying what skills and knowledge are necessary for instructional purposes; a task analysis breaks down each task into its component skills and activities. Second, performance objectives designate which behaviors must be achieved for satisfactory job performance. Finally, criterion-referenced measures are the tools used to assess performance; they are activities which are based on the performance objectives. Job Corps does provide task analyses and performance objectives through its Occupational Training Guides and Training Achievement Records. Job Corps then designs Occupational Training Plans which contain specific activities to be performed. V-TECS materials would be helpful to teachers who are setting up their programs and who are designing Occupational Training Plans where none are available. They would also provide a structure for sequencing objectives and for dividing course content into manageable units and lessons. Courses for which V-TECS are available are listed in the bibliography under the "General" heading.

Other excellent general references for instructors are the Resource Guides for Performance-Based Instruction, published by the University of Maryland Vocational Curriculum Research and Development Center. The guides are available in nine content areas (Auto Body, Auto Mechanics, Carpentry, Cosmetology, Electricity, Machine Shop, Masonry, Graphic Arts, Welding, Word Processing) and cost $3.50 each. These reference books contain much valuable information. Each includes a bibliography of printed and audio-visual materials for content area. Order information, price, and a narrative description/evaluation are included in appendix A of this report.

Each guide contains information on development of a performance-based instructional program as well as a section entitled "General Resources" which explains the ERIC system, lists curriculum development centers throughout the country, and contains a complete bibliography of sources. Dr. Gerry Day of the Maryland State Department of Education was a project director responsible for the development of the resource guides. Sarah Kryszak, reference coordinator, University of Maryland Vocational Curriculum Research and Development Center, is responsible for dissemination of guides. Further information is contained in the "General" section of the attached bibliography.

Another good reference source was obtained from the U.S. Office of Education, Division of Vocational-Technical Education. It is entitled Vocational Instructional Materials for Students with Special Needs. This is a computer printout of curriculum materials in all major vocational areas. The printout includes information on each item such as cost, source, content, and comments on possible use. The Job Corps occupational training guides are listed in addition to many other curriculum materials. The advantage of this catalog is that all materials listed are for students who have special needs. A disadvantage is that it is dated August 1972. Many materials have been developed in the past few years which would not be listed. On the other hand, the Resource Guides developed by the University of Maryland are not slanted specifically for use with disadvantaged students; thus some materials listed would not be suitable for use with corpsmembers.

Resource Centers

In addition, a National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE) has been established by the U.S. Office of Education to provide an interchange of information on and sharing of vocational curricula. Six regions house curriculum management centers which provide services relating to curriculum and instructional materials. Addresses for these regions are listed in exhibit 2 under the NNCCVTE heading. The Western Maryland Vocational Resource Center also houses many vocational materials and has a catalog available. However, this resource center may be closing in the fall, and materials may be brought to the University of Maryland curriculum library.

Research Projects

TEAM Associates also had an ERIC search performed. The search had to be run several times before accessing relevant materials. Some of the information looks helpful; much of it is not. One project sponsored by the National Center for Education Research and Development (HEW) and performed by the Philadelphia, Pennsylvania School District looks particularly helpful. A field test was conducted to determine if entry-level competencies could be developed in vocational areas by means of individual sound-on-slide projectors. Results show that educable mentally retarded students, who read on a low level, learned "significantly better." Some of the content areas (nurses aide, auto mechanics, industrial electricity) appear to match those of Job Corps. In addition, several child-care aide curriculum materials have recently been developed. Several teacher resources are listed in the ERIC document also. Most of these are articles of general interest in the area of curriculum development.

Prepared Training Curricula

Let us take a further look at specific materials which were located. First, Associated General Contractors of America, working in conjunction with the Oklahoma State Department of Education, has developed four sets of curricula, including students' and teachers' guides pertaining to the construction area: commercial carpentry, cement masonry, bricklaying and a general construction trades cluster, the latter developed for use with disadvantaged and handicapped students. Other manuals relating to auto mechanics and electronics have also been developed. Comments and further descriptions of these materials are contained in the bibliography. In general, these materials would be helpful to the new instructor who must design and sequence objectives and who needs a guide for related classroom instruction. Associated General Contractors (AGC) has donated a set of these materials for use with building trades courses to Job Corps and they are available for review. AGC would also send sample materials for preview to centers.

Next, the National Association of Home Builders has been working on a similar project of curriculum review and evaluation in the building trades areas. As of now, NAHB is developing the kits for selected centers. NAHB has reviewed many materials, especially related audio-visuals. They have designed curriculum kits for building trades instructors to field test and to critique. After gaining this input, the kits will be finalized and should be available early next year. This effort should be recognized for the invaluable assistance it will provide to Job Corps instructors in the building trades areas.

Other sources, such as state departments of vocational education and curriculum research centers, had task analyses and many curriculum guides available. But actual printed curricula useful to corpsmembers, including workbooks and texts, were difficult to locate. Most workbooks were to be used with a text on a twelfth grade reading level. For example, all of the welding texts found were on an advanced secondary or college level; thus, these materials were not included as useful for Job Corps purposes. The same principle applies to many areas--especially those of cement masonry, electrical appliance repair, and heavy equipment repair. The one good source obtained on diesel repair contains an extensive listing of manufacturers and audiovisual aids for use in this area. The document was obtained one week before the due date for the report; further evaluation of these materials needs to be performed. Of those materials reviewed, the New Jersey and Delmar materials are consistent in their development of printed curricula which are suited to students with special needs.

The emphasis on related mathematical skills in the materials mentioned above coincides with an expressed need for more curricula in this area. Vocational instructors and managers at Job Corps centers have voiced a need for more instruction and practice in mathematical areas such as whole numbers and fractions. The Practical Problems in Mathematics series in the "General-Multiple Listing" section of the bibliography would be a good supplement for corpsmembers having difficulty in performing vocational tasks because of math deficiencies.

In view of the fact that so little seems to be available in terms of related printed classroom instructional materials, any information gained would be of value to all centers and should be shared. On the other hand, there is a plethora of audio-visual material available. Tool companies and appliance companies produce much good material, as do commercial audio-visual producers. And the NICEM index contains over one hundred thousand listings of audio-visual producers.

IV. RECOMMENDATIONS

In light of these findings, let us proceed with recommendations which have arisen from the research effort. First, Job Corps has no record of materials currently in use. Without this information, program evaluation and materials assessment are extremely difficult to implement. The Job Corps National Office could establish a data bank of materials in use for each course; this could be one element of an overall program monitoring and evaluation system. Next, since there is so much audio-visual material available, an entire study could encompass the proper use of these materials. More criteria need to be set for the use of audio-visuals at Job Corps centers. Too, Job Corps might consider making its own A/V material; some centers have been doing so, but a full scale effort to develop slide programs of correct task procedures, for example, might be undertaken. Job Corps might hire a contractor with a media specialist to develop certain audio-visuals. But a preliminary study should be done first to determine what type of A/V material is most effective in particular subject areas and when certain learning objectives are being applied (learning rules and principles vs. visual identification). Too, in order to ensure that new materials - print or audio-visual - are being used most effectively, the Department of Labor should provide technical assistance to the Job Corps centers. In addition, Job Corps should field-test these materials at selected centers before final approval.

A final recommendation would be to alter research methodology in future efforts to locate this type of curricula. For example, with so many available sources of audio-visual materials, a project which includes nineteen vocations becomes unwieldly. We would recommend that content experts work with media consultants to evaluate materials in specific content areas. A project coordinator in Washington, D.C., could manage the work effort and compile results. If the above suggestion is not workable, at the very least, the project scope should decrease in size so that a broader sample of materials in each area can be adequately evaluated.

At this stage in the project, since some preliminary research has been done, content experts need to be drawn into the work effort so that curriculum kits for each vocation can be developed. The content experts could be Job Corps instructors in the specific areas. They could match required competencies with those included in the materials, delete material not required for entry-level skills, or add needed material to make a complete and more standardized package. This could be accomplished by task force within each region. In summary, our recommendations include the following in an order of suggested importance:

- That Job Corps form task forces to develop curriculum kits
- That Job Corps be provided with technical assistance in the most effective use of new curriculum materials
- That Job Corps should field-test selected materials
- That further study on appropriate use of audio-visuals materials should be performed
- That Job Corps be provided with technical assistance in developing its own audio-visuals

- That Job Corps establish a data bank of existing materials in use at centers
- That the research methodology be altered for future work efforts

Exhibit 1

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS

DATE

NAME OF DEVELOPERS

SUBJECT AREA

ORDER INFORMATION

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
___ other ______________________
____
____
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

Exhibit 1 (cont.)

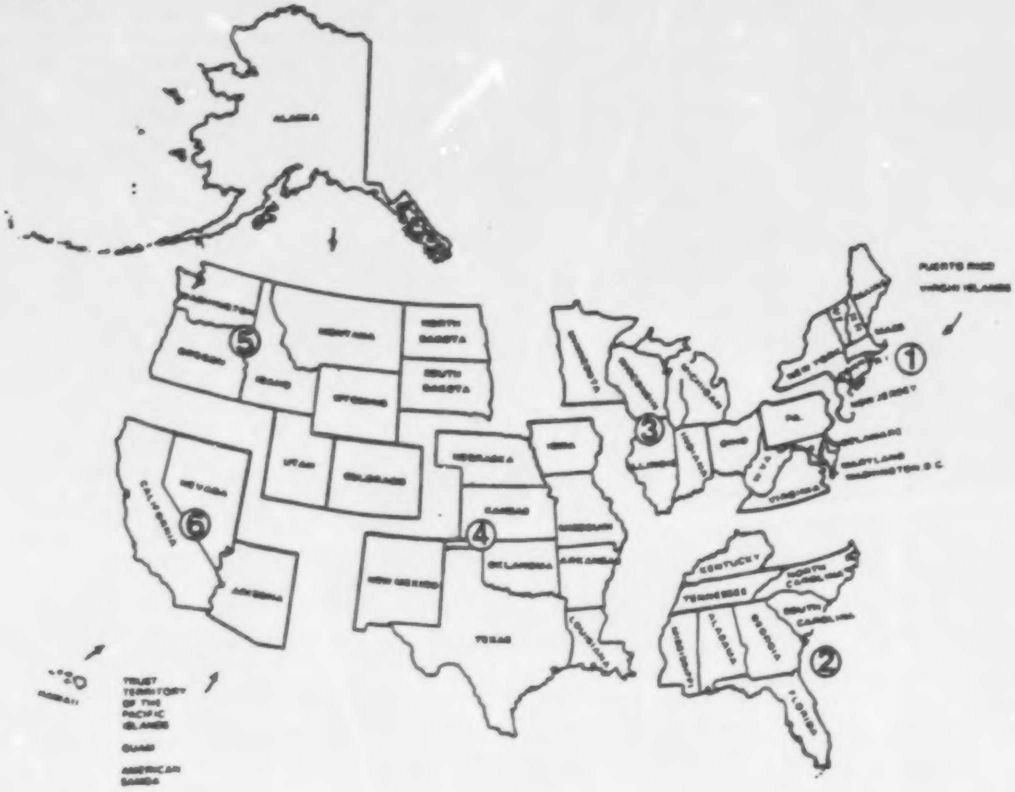
DESCRIPTION

COMMENTS AND RECOMMENDATIONS

Exhibit 2

National Network for Curriculum Coordination in Vocational and Technical Education

Regional makeup has fallen into the breakdown of states depicted below.



ALASKA
PUERTO RICO
VIRGIN ISLANDS
①
②
③
④
⑤
⑥
NEW JERSEY
DELAWARE
MARYLAND
WASHINGTON D.C.
TEXAS
FLORIDA
HAWAII
TRUST TERRITORY OF THE PACIFIC ISLANDS
GUAM
AMERICAN SAMOA

1 **Northeast Curriculum Coordination Center**
Bureau of Occupational Research
Division of Vocational Education
225 West State Street
Trenton, New Jersey 08625

2 **Southeast Curriculum Coordination Center**
Mississippi State University
Research and Curriculum Unit
Drawer JW
Mississippi State, Mississippi 39762

3 **East Central Curriculum Management Center**
Illinois Office of Education
100 North First Street (E-426)
Springfield, Illinois 62777

4 **Midwest Curriculum Coordination Center**
Oklahoma State Department of
Vocational & Technical Education
1515 West 6th Avenue
Stillwater, Oklahoma 74074

5 **Northwestern Curriculum Coordination Center**
Washington State Coordinating Council
for Occupational Education
222 Airdustrial Park / Box 17
Olympia, Washington 98504

6 **Western Curriculum Coordination Center**
Vocational Education Section
Department of Education
721 Capitol Mall
Sacramento, California 95814

APPENDIX A

INTRODUCTION

The following listing is a selected bibliography of available curricula in the nineteen training courses under study. Each item in the bibliography is listed alphabetically by title in the appropriate section. Each section is devoted to a vocational area — except for the section entitled "General-Multiple Listing," which contains materials applicable to more than one vocational course area.

Next, evaluative criteria are listed and have been checked where applicable. In addition, from the list of criteria, the instructor or resource person should be able to form a general idea about the suitability of the material for use with corpsmembers. Most of these criteria were established by a team of vocational education experts at the University of Maryland Vocational Curriculum Research and Development Center in College Park, Maryland. The second page of the individual evaluation contains a description of content, and offers comments and recommendations as to how the material can be used effectively, special problems that may be encountered, and contains the specific reading level, if available.

At the end of each section of vocational materials, an evaluation summary ranks the materials in that section according to possible usefulness with corpsmembers at a Job Corps center. It must be kept in mind that many excellent materials were excluded from this evaluation because of the level of difficulty. A primary criteria for inclusion in this listing was that the materials be on a level commensurate with that of a majority of corpsmembers.

It is suggested that this listing be used as a preliminary survey of some available materials; the list is by no means exhaustive. Too, instructors and content experts should preview the materials with a critical eye. The investment, especially where audio-visuals are concerned, is large.

It is hoped that the bibliography will serve as an aid to those new centers that need curriculum material and will also help existing centers by listing new materials that have recently become available. The criteria listed on the evaluation form should provide general guidelines for choosing materials for use at centers. These items, as well as the cost, should be considered before purchasing materials. For example, if the material has performance objectives, is there a fairly close match between those objectives and the ones listed on the Training Achievement Record? If there are no performance objectives, could objectives be written to suit the material? How large a task would it be, and who would do it? Too, the materials might be motivational for a middle class adolescent, but will they be suitable for use with minorities? Are minorities depicted or heard? If these criteria are used as guidelines for choosing materials, Job Corps should be purchasing curricula that works.

INDEX OF JOB TITLES

Automobile Body Repairer.................................... 481

Automobile Mechanic.................................... 495

Automobile Mechanic Helper.................................... 509

Baker.................................... 515

Brick and Stone Mason.................................... 523

Building Repairer.................................... 529

Carpenter, Construction.................................... 539

Cement Mason.................................... 559

Clerk, General.................................... 565

Clerk, Typist.................................... 575

Cook.................................... 591

Electrician.................................... 603

Electrical Appliance Repairer.................................... 615

Heavy Equipment Repair.................................... 625

Keypunch and Verifier Operator.................................... 631

Nurse's Aide.................................... 637

Offset Press Operator.................................... 651

Painter.................................... 659

Welder.................................... 665

General - Instructor Aid.................................... 673

General - Multiple Listing.................................... 695

AUTOMOBILE BODY REPAIRER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Auto Body

DATE 1974

NAME OF DEVELOPERS Not Available

SUBJECT AREA Auto Body Repair

ORDER INFORMATION
Oklahoma State Department
Vocational and Technical Education
Curriculum and Instructional Materials Center
1515 W. Sixth Ave., Stillwater, Oklahoma 74074

MATERIAL FORMAT

- hardbound
- [✓ paper bound]
- loose leaf
- other

- additional budget required for yearly replacement
- materials nonconsumable if separate answer sheet provided
- subject index
- bibliography/references
- [✓ performance objectives]
- [✓ criterion-referenced measures]
- [✓ student activities]
- student work sheets
- [✓ review questions]
- answer key

INTENDED USE

- [✓ student resource]
- [✓ teacher resource]
- [✓ individual instruction]
- group instruction

ILLUSTRATIONS

- line copy
- photographs
- charts/graphs
- black & white
- color

MATERIAL READABILITY

- large print format
- double column copy
- generous paragraph spacing
- high interest level
- low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ethnic groups meaningfully depicted
- develops self-worth concept
- develops world of work concept
- [✓ develops craftsmanship concept]

DESCRIPTION

Units of instruction have developed in the following areas: Safety/Orientation, Body and Frame Construction, tools, welding, metal repair, refinishing, air conditioning, circuity and wires, hardware, glass, and trim, and damage estimating.

The teacher's guide is $20.00; the student's, $10.00.

COMMENTS AND RECOMMENDATIONS

These instructional units are similar to curriculum materials developed jointly by Oklahoma and Associated General Contractors (see "General-Multiple Listing" section of bibliography). There is a question of how motivational they would be with corpsmembers, but they could be used as a supplement in related classroom instruction.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Auto Body Refinishing
DATE	June, 1970
NAME OF DEVELOPERS	Leonard Colucci Camden County Vocational and Technical Schools

SUBJECT AREA	Auto Body Repairer	
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers State University Building 4103-Kilmer Campus, New Brunswick, N.J.	$4.25 AB-8

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other stapled

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
_X_ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
_X_ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
_X_ photographs
___ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

Text discusses necessary equipment, and tools and material and the purposes for auto refinishing. Each unit also includes student activities and achievement tests.

COMMENTS AND RECOMMENDATIONS

Recommended to be used only with instructor assistance.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Auto Body Repair-1
DATE	1962
NAME OF DEVELOPERS	John E. Radvany Marie H. Katzenbach School for the Deaf

SUBJECT AREA	Auto Body Repairer	
ORDER INFORMATION	Vocational Technical Curriculum Laboratory Rutgers University Building 4103 - Kilmer Campus, New Brunswick, N.J.	$2.75 AR-8

MATERIAL FORMAT

☐ hardbound
☐ paper bound
☒ loose leaf
☐ other ____________________

☐ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☒ subject index
☒ bibliography/references
☐ performance objectives
☐ criterion-referenced measures
☒ student activities
☐ student work sheets
☒ review questions
☐ answer key

INTENDED USE

☐ student resource
☐ teacher resource
☒ individual instruction
☒ group instruction

ILLUSTRATIONS

☒ line copy
☐ photographs
☐ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☐ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

☐ ethnic groups meaningfully depicted
☐ develops self-worth concept
☒ develops world of work concept
☒ develops craftsmanship concept

DESCRIPTION

Book discusses in detail subject areas of -- Care of Shops and Tools ,materials and parts of the automobile, removal and assembly, refinishing, care of the finish, metal repair, and acelylene welding. The lessons, include objectives, materials needed,and an achievement test at the end of each unit.

COMMENTS AND ECOMMENDATIONS

Text is a little too advanced for low-level readers. More suited for instructor as a supplement.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Related Mathematics 1 Auto Body
DATE	1974
NAME OF DEVELOPERS	E. A. Porroni Trenton Vocational and Technical High School

SUBJECT AREA	Mathematics for Auto Body Workers	
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University, Bldg. 4103, Kilmer Campus New Brunswick, N.J.	$5.00 No. AB-11

MATERIAL FORMAT

☐ hardbound
☐ paper bound
☒ loose leaf
☐ other ____________________

☒ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☐ subject index
☐ bibliography/references
☐ performance objectives
☐ criterion-referenced measures
☒ student activities
☐ student work sheets
☐ review questions
☒ answer key

INTENDED USE

☒ student resource
☐ teacher resource
☐ individual instruction
☐ group instruction

ILLUSTRATIONS

☒ line copy
☐ photographs
☒ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☒ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☒ low reading level 7th grade

FEATURES FOR DISADVANTAGED STUDENTS

☐ ethnic groups meaningfully depicted
☐ develops self-worth concept
☐ develops world of work concept
☒ develops craftsmanship concept

DESCRIPTION

This text and workbook contains units on whole numbers, fractions, decimals, percentage, measurement, and ratio. Each lesson has a general objective, related information, and an assignment. Word problems related to the trade are included as well as drills.

COMMENTS
AND
RECOMMENDATIONS

This is an excellent book. Students could use this book in basic math while they are enrolled in the trade. Strongly recommend.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Supervised Study Guide for Related Instruction
DATE	1972
NAME OF DEVELOPERS	Troy Notgrass

SUBJECT AREA	Auto Body Repairer
ORDER INFORMATION	Instructional Materials Services Division of Extension, Univ. of Texas, Austin, Texas

MATERIAL FORMAT

___ hardbound
___ paper bound
X loose leaf
___ other ____________________
____
____

X additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
X student activities
___ student work sheets
X review questions
X answer key

INTENDED USE

X student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

X large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level 9th Grade

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This guide contains assignment sheets, to be used as reinforcements of hands-on experience. The sheets contain performance objectives and knowledge questions. Two texts are used as a basis for the assignment sheets: Automobile Sheet Metal Repair and How to Control Auto Body Sheet Metals.

COMMENTS AND RECOMMENDATIONS

The reading level is above that of most corpsmembers. However, the teacher might use this source as a guide to organize course curriculum.

Auto Body Repairer	PERFORMANCE OBJECTIVES 1	2	3	COST EFFECT. 1	2	3	SUPPL. ACTIVITIES 1	2	3	ILLUSTR. 1	2	3	READABILITY 1	2	3	FEATURES/ DISADV. 1	2	3	OVERALL USE. 1	2	3
1. Auto Body	●			●				●				●		●			●			●	
2. Auto Body Refinishing	●			●				●			●			●			N/A			●	
3. Auto Body Repair I	●			●				●			●			●			N/A			●	
4. Related Math I - Auto Body		N/A		●				●			●			●			N/A		●		
5. Supervised Study Guide/Related	●				●			●				●			●		N/A			●	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

AUTOMOBILE MECHANIC

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Auto Mechanics I and II
DATE	Rev. 1976 and 1978, respectively. Originally, 1971.
NAME OF DEVELOPERS	Not Available
SUBJECT AREA	
ORDER INFORMATION	Oklahoma State Department Vocational and Technical Education Curriculum & Instructional Materials Center 1515 W. Sixth Ave., Stillwater, Oklahoma 74074

MATERIAL FORMAT

hardbound
_X_ paper bound
___ loose leaf
___ other ______________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
_X_ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

Auto Mechanics I includes units of instruction on the following: orientation and procedure, measuring, engine, suspension, and brakes. Book II includes units on engine overhaul, electrical, power train, and accessories.

COMMENTS AND RECOMMENDATIONS

These units are similar to those with the "Curriculum Materials," in the section entitled "General-Multiple Listing."

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Automotive Mechanics Series

DATE: 1975-77

NAME OF DEVELOPERS:

SUBJECT AREA: Auto Mechanics

ORDER INFORMATION:
Bergwall Productions
839 Stewart Ave.
Garden City, N.Y. 11530

Order Nos. 401-425
From $69.00 to $138.00 each

MATERIAL FORMAT

- ___ hardbound
- ___ paper bound
- ___ loose leaf
- _X_ other filmstrips
  cassettes
- ___ additional budget required for yearly replacement
- ___ materials nonconsumable if separate answer sheet provided
- ___ subject index
- ___ bibliography/references
- ___ performance objectives
- ___ criterion-referenced measures
- ___ student activities
- ___ student work sheets
- ___ review questions
- ___ answer key

INTENDED USE

- _X_ student resource
- ___ teacher resource
- _X_ individual instruction
- ___ group instruction

ILLUSTRATIONS

- ___ line copy
- ___ photographs
- ___ charts/graphs
- ___ black & white
- _X_ color

MATERIAL READABILITY

- ___ large print format
- ___ double column copy
- ___ generous paragraph spacing
- _X_ high interest level
- ___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ___ ethnic groups meaningfully depicted
- ___ develops self-worth concept
- ___ develops world of work concept
- _X_ develops craftsmanship concept

DESCRIPTION

These filmstrip series are excellent materials, but each strip contains so much information that all but the most advanced corpsmembers might find them too difficult. No. 411 on Automotive Safety is especially good on demonstrating proper methods and use of tools. Some of the filmstrips which are narrower and more specific in scope might be more appropriate for use with corpsmembers, for examples #416-423.

COMMENTS AND RECOMMENDATIONS

Especially recommend #416 to 423. These strips are narrow enough in focus not overwhelm the students, and some of them are useful with the beginner (i.e., lubrication, wheel balancing). These filmstrips give tips on diagnosing problems and solving them.

(See attached sheet for listing.)

Following is a list of available filmstrips in this series:

#401 Igntion System Explained

#402 How to Do a Major Engine Tune Up

#403 Front End Explained

#404 Hydraulic Brake System Explained

#405 Internal Combustion Engine Explained

#406 Automotive Cooling System Explained

#407 Operation of the Fuel System Explained

#408 Problems of the Fuel System Explained

#409 Problems of the Internal Combustion Engine Explained

#410 How to Overhaul an Engine

#411 Automotive Shop Safety

#412 Automotive Clutch Assembly Explained

#413 Automotive Standard Transmission Explained

#416 Lubrication Services

#417 How to Balance Wheels

#418 How to use a Drum Lathe

#419 How to use a Value and Value Seat Refacer

#420 How to Use Automotive Precision Tools

#421 How to Overhaul a Carburetor

#422 How to Diagnose Hydraulic Brake Problems

#423 How to Serve the Cooling System

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Automotive Mechanic Series

DATE: 1976 Rev.

NAME OF DEVELOPERS: Not Available

SUBJECT AREA: Auto Mechanics

ORDER INFORMATION:
DCA Educational Products $360.00
424 Valley Rd.
Warrington, Pa. 18976

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other sets of transparencies
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
_X_ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This series contains information on all phases of auto mechanics. The series is divided into eleven groups of related topics.

COMMENTS AND RECOMMENDATIONS

Instructors may select portions of the series which their students are having the most difficulty with. These aids can serve as reinforcements to hands-on experience.

Below is a list of transparency sets:

I The Fuel System	$28.00
II Engines	37.00
III Electrical System	47.50
IV Cooling System	21.00
V Clutch Assembly	9.50
VI Transmission	52.50
VII Rear Axle Assembly	39.00
VIII Brakes	29.50
IX Front End Assembly	61.50
X Wheels and Tires	23.25
XII Automobile Air Conditioning	28.50

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Basic Automotive Series

DATE 1970

NAME OF DEVELOPERS Not Available

SUBJECT AREA Automobile Mechanic

ORDER INFORMATION
Delmar Publishers
Mountainview Ave., Albany, N.Y. 12205
$9.45 - set of 9 books
Order No. 0551-6

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
_X_ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
_X_ photographs (illustrations)
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

_X_ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This set of booklets contains programmed instruction in auto mechanics.

The information is divided into small frames. Each frame concludes with a review question to aid student comprehension.

Also, a final review appears at the end of the text. The material is designed for students to learn at their own pace.

COMMENTS AND RECOMMENDATIONS

The instructor could use the material in these books as a teaching guide. The material in the booklets should be used as soon as possible after demonstration with students and experiential learning takes place. Must only be used with students on or above a fourth grade learning level. The following booklets are available:

Automobile Engine
Fuel System
Differential System
Cooling and Exhaust System
Brake System
Lubrication System
Steering System
Standard Transmission
Ignition System

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Wheel and Steering Alignment
DATE	September, 1968
NAME OF DEVELOPERS	Leonard Colucci Camden County Vocational and Technical School

SUBJECT AREA	Auto Mechanic
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers University Building 4103-Kilmer Campus New Brunswick, N.J. $3.50 CU-150

MATERIAL FORMAT

- ☐ hardbound
- ☐ paper bound
- ☐ loose leaf
- ☒ other stapled

- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumable if separate answer sheet provided
- ☐ subject index
- ☒ bibliography/references
- ☒ performance objectives
- ☐ criterion-referenced measures
- ☒ student activities
- ☐ student work sheets
- ☐ review questions
- ☐ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☐ individual instruction
- ☐ group instruction

ILLUSTRATIONS

- ☐ line copy
- ☒ photographs
- ☐ charts/graphs
- ☒ black & white
- ☐ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☐ high interest level
- ☒ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☐ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

Topics discussed are: Types of suspension systems, theory of wheel alignment, alignment equipment, caster angle, camber angle, steering axis inclination, toe, toe-out on turns, tracking, and, tire and wheel balance. Each unit includes an objective and an assignment for students.

COMMENTS AND RECOMMENDATIONS

Recommended only as a supplemental text with instructor assistance.

AUTOMOBILE MECHANIC HELPER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Auto Shop Safety

DATE:

NAME OF DEVELOPERS: Not Available

SUBJECT AREA: Auto Mechanics

ORDER INFORMATION:
DCA Educational Products $60.00
424 Valley Rd.
Warrington, Pa. 18976

MATERIAL FORMAT

- ____ hardbound
- ____ paper bound
- ____ loose leaf
- _X_ other 20 transparencies
- ____ additional budget required for yearly replacement
- ____ materials nonconsumable if separate answer sheet provided
- ____ subject index
- ____ bibliography/references
- ____ performance objectives
- ____ criterion-referenced measures
- ____ student activities
- ____ student work sheets
- ____ review questions
- ____ answer key

INTENDED USE

- _X_ student resource
- ____ teacher resource
- _X_ individual instruction
- _X_ group instruction

ILLUSTRATIONS

- ____ line copy
- ____ photographs
- ____ charts/graphs
- ____ black & white
- _X_ color

MATERIAL READABILITY

- ____ large print format
- ____ double column copy
- ____ generous paragraph spacing
- ____ high interest level
- ____ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ____ ethnic groups meaningfully depicted
- ____ develops self-worth concept
- ____ develops world of work concept
- _X_ develops craftsmanship concept

DESCRIPTION

There are twenty multi-colored transparencies in this set on auto safety. The purpose of these aids is to help students develop work habits necessary for on-the-job performance. The set is designed for use with beginners. Topics covered are personal safety, tool safety, and chemical and fuel safety.

COMMENTS AND RECOMMENDATIONS

The transparencies are easy to understand and would be suitable for use with corpsmembers just beginning their vocational training, as part of a general shop orientation. The instructors guide recommends that as a result of the a/v presentation, the class formulate its shop safety rules and enforce them. Although the vocational training program is individualized, new corpsmembers could receive this type of orientation in small groups.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Auto Mechanic/Helper	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Auto Mechanics I & II	●			●				●				●		●				●		●	
2. Automotive Mechanics Series/Bergwall		N/A			●				●	●				N/A				●		●	
3. Automotive Mechanic Series/DCA		N/A			●				●	●				N/A				●		●	
4. Auto Shop Safety (For Auto Mechanic Helper as well as Auto Mechanic)		N/A		●				●		●				N/A				●	●		
5. Basic Automotive Series	●			●				●				●		●			N/A			●	
6. Wheel and Steering Alignment	●			●				●			●			●			N/A			●	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

BAKER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Mathematics for the Baker
DATE	1976
NAME OF DEVELOPERS	Melvin Bogdany Middlesex County Vocational and Technical School

SUBJECT AREA	Baking Occupations
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University Building, 4103 Kilmer Campus $5.75 New Brunswick, N.J. 08903 No. BA-339

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other stapled

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
_X_ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level 6th grade

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This workbook contains instruction and drill on the basic functions plus fractions, decimals, weights and measures, ratio, and business operations information. Related trade problems are included.

COMMENTS AND RECOMMENDATIONS

Excellent workbook, as it is written on an understandable level and does contain some drill.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	The How-to- Make-it Bakery Book	
DATE	1967	
NAME OF DEVELOPERS	Cy Sommer Middlesex Vocational and Technical High School	
SUBJECT AREA	Baking Occupations	
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University Bldg., 4103 Kilmer Campus New Brunswick, N.J. 08903	$5.25 No. BA-19

MATERIAL FORMAT

- ☐ hardbound
- ☒ paper bound
- ☐ loose leaf
- ☐ other stapled
- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumable if separate answer sheet provided
- ☐ subject index
- ☐ bibliography/references
- ☐ performance objectives
- ☐ criterion-referenced measures
- ☐ student activities
- ☐ student work sheets
- ☐ review questions
- ☐ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☒ individual instruction
- ☒ group instruction

ILLUSTRATIONS

- ☒ line copy
- ☒ photographs
- ☐ charts/graphs
- ☒ black & white
- ☐ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☒ generous paragraph spacing
- ☐ high interest level
- ☒ low reading level 7th - 8th grade

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☐ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

This book contains units on preparation of pies, cookies, cakes, doughs breads, etc. Each unit has many step-by-step photographs of the baking porcess. The text is fairly straight forward. Concise instructions written in performance terms are located beside the photographs.

COMMENTS AND RECOMMENDATIONS

This book could be useful for disadvantaged students as visual content is high. However, reading level might be too high for some students.

[illegible]	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Baker	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Mathematics for the Baker		N/A		•			•			•				•			N/A		•		
2. How-To-Make-It Bakery Book		•		•					•	•				•				•		•	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

BRICK AND STONE MASON

DESCRIPTION

These two series contain basic trade information in an interesting and colorful format. Content includes visuals on tools, common mortar joints, spreading the mortar, laying to a line, plumb bobs, foundations, stone cutting, setting stonework, etc. Fifteen transparencies are in group one; 7 are in group two. Four of the transparencies contain overlays that include terminology to match the visual; otherwise, this is included on the visual.

COMMENTS AND RECOMMENDATIONS

These transparencies are suitable for use with beginners who are familiarizing themselves with the trade. An advantage is that they could be used with a corpsmember who has difficulty in reading, in addition to serving as a useful aid for all students. Instructors could use these with small groups of students, or even as individual study aids prior to tests. The transparencies could be very useful in a vocational program.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Masonry
DATE	1977
NAME OF DEVELOPERS	John J. Richards Blaine M. Harteg

SUBJECT AREA	Brick/Stone Masonry	
ORDER INFORMATION	DCA Educational Products 424 Valley Rd. Warrington, Pa. 18976	$210.00

MATERIAL FORMAT

- ☐ hardbound
- ☐ paper bound
- ☐ loose leaf
- ☒ other 12 filmstrips
  - 12 cassettes
  - study guide
- ☐ additional budget required for yearly replacement
- ☒ materials nonconsumable if separate answer sheet provided
- ☒ subject index
- ☐ bibliography/references
- ☒ performance objectives
- ☒ criterion-referenced measures
- ☒ student activities
- ☒ student work sheets
- ☒ review questions
- ☒ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☒ individual instruction
- ☐ group instruction

ILLUSTRATIONS

- ☐ line copy
- ☐ photographs
- ☐ charts/graphs
- ☐ black & white
- ☒ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☒ high interest level
- ☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☒ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

These materials are divided into four groups of related topics, with each series progressing in difficulty. For example, skill development progresses from identification of hand tools to component replacement. The four basic groups include information on the following topics: tool equipment and service safety, ACR tubing, problem diagnosis (access valves, guage manifolds, system analysis), and servicing of systems, including replacing, evacuating, and charging components.

A Study Guide is included in the packet, which includes a written script for each tape and a student worksheet, designed to be completed on a separate sheet of paper. The worksheets contain objectives written in behavioral terms and content questions that ask the student to explain service processes.

COMMENTS AND RECOMMENDATIONS

The script is written using performance terminology (insert, strike, bend, etc.) and is clear and direct. However, the procedures outlined on each filmstrip are detailed and complex. The instructor could use these audio-visual materials as aids and reinforcements to hands-on experience; the corpsmember should be introduced to new procedures through instructor demonstration. The filmstrips are designed for individual instruction; thus the instructor could have the corpsmembers use the worksheets as a study tool for a test, or for quiz purposes. The corpsmember who cannot read on a fourth to fifth grade level could be tested orally for comprehension. These materials are more useful than much available curricula; they contain performance objectives and ways to measure learning that takes place.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Brick and Stone Masonry	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. "Bricks and Blocks" "Stone Masonry"		N/A		●					●	●			● (High Interest)				N/A		●		
2. Masonry (Brick/Stone)	●			●			●			●			● (High Interest)				●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

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BUILDING REPAIRER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Building Maintenance
DATE	1971
NAME OF DEVELOPERS	Raymond E. Pearson Salem County Technical Institute

SUBJECT AREA	Building Repairer
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers-State University, Building 4103-Kilmer Campus New Brunswick, N.J.

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other stapled

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
_X_ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

The course outline describes all necessary skills needed in the job of building repair as well as material needed.

COMMENTS AND RECOMMENDATIONS

Not recommended for vocational trainees; however, would be helpful to instructor.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Building Services Glossary of Key Words
DATE	Not Available
NAME OF DEVELOPERS	Not Available

SUBJECT AREA	Building Maintenance	
ORDER INFORMATION	Vocational Technical Curriculum Laboratory Rutgers University Bldg. 4103 Kilmer Campus New Brunswick, N.J.	No. EN 907 $3.00

MATERIAL FORMAT

☐ hardbound
☐ paper bound
☒ loose leaf
☐ other in a binder

☐ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☒ subject index
☐ bibliography/references
☐ performance objectives
☐ criterion-referenced measures
☐ student activities
☐ student work sheets
☐ review questions
☐ answer key

INTENDED USE

☒ student resource
☒ teacher resource
☒ individual instruction
☒ group instruction

ILLUSTRATIONS

☒ line copy
☐ photographs
☒ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☐ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☒ low reading level 3rd to 4th grade

FEATURES FOR DISADVANTAGED STUDENTS

☐ ethnic groups meaningfully depicted
☐ develops self-worth concept
☒ develops world of work concept
☐ develops craftsmanship concept

DESCRIPTION

This booklet contains the key words used in the building maintenance occupations. Each word is simply defined and is used once in a simple sentence. A picture illustrates each term. The purpose of this glossary is to improve the students comprehension of technical terms used in the trade.

COMMENTS AND RECOMMENDATIONS

Instructors will find this glossary very helpful in orienting the new student to the basic terminology of the trade. The glossary could be used as a reinforcement of concepts presented by the instructor. The introduction contained in the glossary provides several creative ideas for its use.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Using Hand Tools, Parts 1 and 2
DATE	1975
NAME OF DEVELOPERS	William Ronan

SUBJECT AREA	Building Trades Occupations - Carpentry, Building Maintenance	
ORDER INFORMATION	Milliken Publishing Co. 1100 Research Blvd. St. Louis, Mo. 63132	Order No.TDT 22 and 23 $9.95 each

MATERIAL FORMAT

- ___ hardbound
- _X_ paper bound
- ___ loose leaf
- _X_ other Transparencies, masters
- ___ additional budget required for yearly replacement
- ___ materials nonconsumable if separate answer sheet provided
- _X_ subject index
- ___ bibliography/references
- ___ performance objectives
- ___ criterion-referenced measures
- _X_ student activities
- _X_ student work sheets
- _X_ review questions
- _X_ answer key

INTENDED USE

- _X_ student resource
- _X_ teacher resource
- _X_ individual instruction
- _X_ group instruction

ILLUSTRATIONS

- ___ line copy
- ___ photographs
- ___ charts/graphs
- ___ black & white
- _X_ color

MATERIAL READABILITY

- ___ large print format
- ___ double column copy
- ___ generous paragraph spacing
- _X_ high interest level
- _X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ___ ethnic groups meaningfully depicted
- ___ develops self-worth concept
- ___ develops world of work concept
- _X_ develops craftsmanship concept

DESCRIPTION

These books each include 16 transparencies, 12 duplicating pages and teacher's guides. The transparencies focus on the safe and correct method of using hand tools, such as hammers, screwdrivers, chisels, rules, squares, snips, pliers, wrenches, files, handsaws and hacksaws. The duplicating pages are student study guides with fill-in-the-blank questions.

COMMENTS AND RECOMMENDATIONS

These books are excellent, low cost, permanent resources that can serve as a supplement to and reinforcement of the learning process. The instructor could review the study guides orally with non-readers.

EVALUATION SUMMARY

[illegible]	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Building Maintenance	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Building Maintenance	●			●				N/A	→	→	→	→	→	→	→	→	→			●	
2. Building Services/Glossary		N/A		●				N/A		●				●				●	●		
3. Using Hand Tools		N/A		●			●			●			● (High Interest)				N/A		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

CARPENTER, CONSTRUCTION

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Carpentry 1: House Framing
DATE	1975
NAME OF DEVELOPERS	Anthony A. Nittoli

SUBJECT AREA	Construction
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory, Rutgers University Building 4103 Kilmer Campus, New Brunswick, N.J. $3.50

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ______________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

___ student resource
___ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

_X_ line copy
_X_ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This book is devoted to wood frame construction of houses. Units contain an objective, related information, an assignment and questions. Some assignments are based on drawings and graphs in the book; some are related "hands on" tasks. Units include: sills, girders, joists, sub-flooring, ceiling and roof, safety, etc.

COMMENTS AND RECOMMENDATIONS

The book has many drawings and graphs which are easy to understand. Written information is precise and to the point. The instructor could use this as a course supplement, giving assignments to individuals, or he could use it with a group, going over the information and questions orally .

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL TUDENTS

TITLE OF MATERIALS	Residential Carpentry (Vocational Trade and Industrial Education)
DATE	1973
NAME OF DEVELOPERS	Wayman R. Penner State Department of Vocational and Technical Education

SUBJECT AREA	Carpenter
ORDER INFORMATION	State Department of Vocational and Technical Education Stillwater, Oklahoma 74074

MATERIAL FORMAT

☐ hardbound
☐ paper bound
☒ loose leaf
☐ other ____________________

☐ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☐ subject index
☐ bibliography/references
☒ performance objectives
☐ criterion-referenced measures
☒ student activities
☐ student work sheets
☐ review questions
☒ answer key

INTENDED USE

☐ student resource
☒ teacher resource
☐ individual instruction
☐ group instruction

ILLUSTRATIONS

☐ line copy
☒ photographs
☒ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☐ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
☐ develops self-worth concept
☐ develops world of work concept
☐ develops craftsmanship concept

DESCRIPTION

Manual includes 12 sections which consist of instructional units. The unit gives behavioral objectives, suggested activities for instructor and students, information sheets assignment sheets, visual aids, tests,and answers to the tests.

COMMENTS AND RECOMMENDATIONS

This manual would be helpful to the instructor, as it is very detailed ; but would be of aid only to more advanced corpsmembers.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Construction - Cluster Guide
DATE	1973
NAME OF DEVELOPERS	M. LeRoy Reynolds, Project Director

SUBJECT AREA	Building Trades Occupations
ORDER INFORMATION	Central Michigan University Mt. Pleasant, Mich. 48859

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
_X_ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This book contains task analysis information. It also includes instructional task modules (similar to Occupational Training Plans) in the Building Maintenance and Residential Construction areas. The modules include performance objectives for each task and suggested instructional methods and materials.

COMMENTS AND RECOMMENDATIONS

These guides may be helpful to new instructors. The guides would need to be checked to determine what concurrent material is contained in the Training Achievement Records.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Marking, Measuring, Layout, Checking, Sawing Tools

DATE 1975

NAME OF DEVELOPERS Russell D. Wells

SUBJECT AREA Building Trades Occupations - Carpentry, Bricklaying, Building Maintenance

ORDER INFORMATION
Milliken Publishing Co. No. TDT 131
1100 Research Blvd., St. Louis, Mo. 63132 $9.95

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
_X_ other transparencies, masters
____
____
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
_X_ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
_X_ high interest level
_X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This book contains 16 transparencies and 8 duplicating pages. The book concentrates on tool names and features.

COMMENTS AND RECOMMENDATIONS

Excellent for beginners who are learning to identify tools. Transparencies can be used for individual study or group instruction. Some of the illustrations on measuring tools are unnecessarily complex.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	The Use of Hand Woodworking Tools
DATE	1978
NAME OF DEVELOPERS	McDonnell and Kaumeheiwa

SUBJECT AREA	Carpentry	
ORDER INFORMATION	Delmar Publishers Albany, N.Y. 12205	0-8273-1098-6 $5.60

MATERIAL FORMAT

- ☐ hardbound
- ☒ paper bound
- ☐ loose leaf
- ☐ other ____________________

- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumable if separate answer sheet provided
- ☐ subject index
- ☐ bibliography/references
- ☐ performance objectives
- ☐ criterion-referenced measures
- ☒ student activities
- ☐ student work sheets
- ☒ review questions
- ☐ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☒ individual instruction
- ☒ group instruction

ILLUSTRATIONS

- ☐ line copy
- ☒ photographs
- ☐ charts/graphs
- ☒ black & white
- ☐ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☒ high interest level
- ☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☐ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

The text discusses the use of hand woodworking tools. Information includes basic principles and related information concerning carpentry safety and tool use. Each unit concludes with review questions. Illustrations are quite good. Directions for tool use or procedure are clearly and precisely written and are numbered.

COMMENTS AND RECOMMENDATIONS

This material would be a good source for a carpentry course. However, instructor intervention would be necessary. This would be a good reinforcement tool for a student who can read on a seventh grade level.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Woodworking Basics
DATE	
NAME OF DEVELOPERS	Patrick E. Spielman

SUBJECT AREA	Carpentry	
ORDER INFORMATION	DCA Educational Products 424 Valley Rd., Warrington, Pa. 18976	$141.50

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other 40 transparencies

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This series of transparencies shows basic concepts involved in skill development. Group I emphasizes shop safety, and deals with basic safety rules, proper materials storage, etc.; Group II deals with woodcutting machines such as router bits, chisels, jointer, and surfacer; Group III is on squaring and building up stock, and Group IV through VIII cover principles involved in glueing, joining, sanding, and fastening.

COMMENTS AND RECOMMENDATIONS

These transparencies would be helpful to the beginning corpsmember. The instructor could use them as reinforcements of hands-on experience with small groups or with individual corpsmembers who are having difficulty in particular areas.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Woodworking Hand Tools Explained
DATE	1977
NAME OF DEVELOPERS	

SUBJECT AREA	Carpentry	
ORDER INFORMATION	Bergwall Productions 839 Stewart Ave. Garden City, N.Y. 11530	No. 703 $138.00

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other 6 color filmstrips
6 cassettes
Study Guide
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
_X_ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This filmstrip series explains types of measuring and marking tools and their uses. The series concentrates on various types of hand saws such as the cross cut, rip saw, portable electric hand saws, etc.; types of files, planes, and drills and bits.

COMMENTS AND RECOMMENDATIONS

These filmstrips are fairly well done. There is much material to be absorbed. If students can operate the equipment and put on a frame or rewind and replay the cassette, more learning will take place. Each strip contains many demonstrations procedures. These filmstrips could be used as reinforcements of hands-on experience.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Woodworking: Wood Joints
DATE	1976
NAME OF DEVELOPERS	Robert D. McConnell

SUBJECT AREA	Carpentry
ORDER INFORMATION	Order No. TDT62 Milliken Publishing Co. $9.95 1100 Research Blvd., St. Louis, Mo. 63132

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other Transparencies, masters, and teacher's guide

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
_X_ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
_X_ high interest level
_X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This book contains 12 transparencies, 12 duplicating pages,and a teacher's guide. Transparencies cover basic wood joints-dado, lap, rabbet, mortise and tenon, dove tail, miter and dowel joints. Each transparency presents basic concepts and methods. Duplicating masters explain different joints and ask students to name them, and tell how they are used.

COMMENTS AND RECOMMENDATIONS

This is an excellent, low cost, permanent resource which can supplement teacher demonstration and which can reinforce basics for beginning students. The instructor could use the duplicating masters as the basis for an oral instead of a written test for those with a low reading level.

Carpentry	PERFORMANCE OBJECTIVES 1	2	3	COST EFFECT. 1	2	3	SUPPL. ACTIVITIES 1	2	3	ILLUSTR. 1	2	3	READABILITY 1	2	3	FEATURES/ DISADV. 1	2	3	OVERALL USE. 1	2	3
1. Carpentry 1: House Framing	●			●			●			●				●			N/A		●		
2. Residential Carpentry	●			Unknown			●			●				●			N/A		●		
3. Construction - Cluster Guide	●			Unknown				N/A	⟶											●	
4. Marking, Measuring...Tools		N/A		●			●			●			● (High Interest)				N/A		●		
5. The Use of Hand Woodworking Tools		N/A			●			●		●				●			●			●	
6. Woodworking Basics		N/A		●					●	●			● (High Interest)				●		●		
7. Woodworking Hand Tools Explained		N/A		●					●	●			● (High Interest)				●		●		
8. Woodworking: Wood Joints		N/A		●			●			●			● (High Interest)				●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

CEMENT MASON

533

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Concrete Technology
DATE	1977
NAME OF DEVELOPERS	George R. White

SUBJECT AREA	Cement Masonry
ORDER INFORMATION	Delmar Publishers 50 Wolf Road Albany, New York $4.20

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________
____

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This text teaches advanced cement masonry skills that include the following: selection and design of concrete mixtures and estimating concrete for a job. It also includes chapters on more basic skills, including uses of concrete, mixing, water, tool use, placing, finishing, and curing concrete, finishing concrete slabs, etc.

COMMENTS AND RECOMMENDATIONS

This text would be too advanced for most corpsmembers. Sections could be pulled for supplemental work and as a reinforcement to hands-on experience. Would be useful as an instructor resource to help organize units of study.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Cement Mason	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Concrete Technology			●	●				●			●			●				●		●	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

CLERK, GENERAL

538

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Information Receptionist
DATE	1974
NAME OF DEVELOPERS	Helen Sams Lois Snyder

SUBJECT AREA	Business/Clerical Cluster
ORDER INFORMATION	Instructional Materials Lab, Trade and Industrial Education Ohio State Univ. 1885 Neil Ave., Columbus, Ohio 43210

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other ____________________
____
____

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
_X_ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This booklet contains a task analysis of the duties of a receptionist. It contains task statements, tools and materials needed, performance objectives, and related academic knowledge needed.

COMMENTS AND RECOMMENDATIONS

This guide might be useful for new instructors at new centers, or for someone starting up a new program.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Office Skills 1 and 2

DATE 1978

NAME OF DEVELOPERS Phyllis C. Morrison

SUBJECT AREA Clerk

ORDER INFORMATION Greg Division - McGraw - Hill 0-07-043233-3
New York, New York 0-07-043234-1

MATERIAL FORMAT

___ hardbound
X paper bound
___ loose leaf
X other workbook
____
____

___ additional budget required for yearly replacement
X materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
X student activities
X student work sheets
X review questions
X answer key

INTENDED USE

X student resource
___ teacher resource
X individual instruction
X group instruction

ILLUSTRATIONS

___ line copy
___ photographs
X charts/graphs
___ black & white
___ color

MATERIAL READABILITY

X large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
X low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
X develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

Office Skills 1 - provides drill material to build basic skills in standard English and Math. A list of vocabulary words and their definitions is also provided.

Office Skills 2 - provides drill material to build basic skills in filing and clerical activities.

Both workbooks provide an answer key to the exercises included.

COMMENTS AND RECOMMENDATIONS

The workshops may be used as a supplement to The Business Office or any course in the business area.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	The Receptionist
DATE	1966
NAME OF DEVELOPERS	Merle W. Wood, Margaret A. McKenna

SUBJECT AREA	Clerk	
ORDER INFORMATION	Gregg Division McGraw - Hill, New York	07-071590-4

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
_X_ other bound

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
___ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
_X_ photographs
___ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
_X_ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

The Receptionist is written in three parts:

1. Meet the Receptionist - discusses appearance and image.
2. The Receptionist Job Responsibilities - discusses all the work expected of a receptionist.
3. The Job You Want - discusses determining the type of business offices one may want to work for.

Each Chapter begins with three questions to stimulate student interest, and points for discussions are presented at the end for review purposes. Also, case studies are provided to present everyday office situations, and problems are designed for student reaction and practice in office procedures.

COMMENTS AND RECOMMENDATIONS

The material may be a little difficult for readers of lower level. Therefore instructor assistance should be provided.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
General Clerk	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Information Receptionist	●			●				N/A →												●	
2. Office Skills 1 and 2				●			●				●			●			N/A			●	
3. The Receptionist		●		●				●		●				●			●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

CLERK, TYPIST

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Automated Instruction
DATE	Not Available
NAME OF DEVELOPERS	

SUBJECT AREA	Clerk-Typist
ORDER INFORMATION	Random House New York, New York

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other slides
cassettes
workbooks
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
_X_ student work sheets
_X_ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
_X_ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
_X_ develops craftsmanship concept

DES.RIPTION

This system was seen in use at a Job Corps center. A small TV screen is positioned above the student's typewriter. The student watches the keys on the screen light up, and letters and words are dictated from the cassette; the student then practices on the typewriter in front of the screen. The cassettes contain directions and guided practice sessions. Workbooks are included with tests and reviews.

COMMENTS AND RECOMMENDATIONS

This is a highly motivational learning tool. The visual aid is an effective instrument to increase and maintain interest.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	BO-CEC Business and Office Careers Course Guide
DATE	
NAME OF DEVELOPERS	Harry Huffman, Project Director Colorado State University

SUBJECT AREA	Business Clerical Occupations	
ORDER INFORMATION	Minnesota Instructional Materials Center 3554 White Bear Lake Ave. White Bear Lake, Minn. 55110	No. 709 $3.50

MATERIAL FORMAT

___ hardbound
___ paper bound
X loose leaf
___ other ____________

___ additional budget required for yearly replacement
X materials nonconsumable if separate answer sheet provided
X subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
X student activities
___ student work sheets
X review questions
X answer key

INTENDED USE

___ student resource
X teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

X line copy
___ photographs
___ charts/graphs
X black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This career education curriculum guide was designed to introduce junior high students to careers in business. It contains units in the following areas: clerical, secretarial, accounting, data processing, business ownership, and pre-employment activities. Each unit includes a purpose, major activities and suggested procedures. Student materials for major activities are at the end of each unit and can be reproduced separately. Many of the student materials are set ups for simulations and learning games.

COMMENTS AND RECOMMENDATIONS

Teachers in the Business Clerical Cluster could use these creative materials in their classrooms to provide variety and maintain student interest. Most of the graphics would be suitable for young adults; a few would not. Highly recommend as a source which teachers can use to make their courses interesting as well as informative.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Applied Office Typewriting
DATE	1978
NAME OF DEVELOPERS	Vern A. Frisch and Joan Swinski Handel

SUBJECT AREA	Clerk, Typist
ORDER INFORMATION	Gregg Division McGraw - Hill Book Company 0-07-022504-4

MATERIAL FORMAT

- ___ hardbound
- ___ paper bound
- ___ loose leaf
- X other kit
- X additional budget required for yearly replacement
- ___ materials nonconsumable if separate answer sheet provided
- ___ subject index
- ___ bibliography/references
- ___ performance objectives
- ___ criterion-referenced measures
- X student activities
- ___ student work sheets
- ___ review questions
- ___ answer key

INTENDED USE

- X student resource
- ___ teacher resource
- X individual instruction
- ___ group instruction

ILLUSTRATIONS

- ___ line copy
- ___ photographs
- ___ charts/graphs
- ___ black & white
- ___ color

MATERIAL READABILITY

- ___ large print format
- ___ double column copy
- ___ generous paragraph spacing
- ___ high interest level
- ___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ___ ethnic groups meaningfully depicted
- ___ develops self-worth concept
- X develops world of work concept
- ___ develops craftsmanship concept

DESCRIPTION

The Applied Office Typewriting practice set includes a job instruction manual, business forms, time sheets, carbon paper, and file folders. The materials are to be used for completing 30 jobs for different kinds of business operations. The students are to perform and complete each assignment as if they were actually working for the organization. The practice set is designed to provide experience in preparing forms for such departments as administration, purchasing, sales, finance, and accounting.

COMMENTS AND RECOMMENDATIONS

The materials provide good practice for students. However, verbal instructions would be required before the start of each task.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Office and Business Occupations Cluster Guide
DATE	1973
NAME OF DEVELOPERS	Michigan Department of Education

SUBJECT AREA	Business Clerical Cluster
ORDER INFORMATION	Central Michigan University Mt. Pleasant, Mich. 48859

MATERIAL FORMAT

___ hardbound
___ paper bound
X loose leaf
___ other ___________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
X bibliography/references
X performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
X teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This book contains a listing of common cluster tasks, in addition to its main focus, a complete listing of tasks, performance objectives, criterion - reference measures and instructional materials for those tasks for the General Clerk occupation.

COMMENTS AND RECOMMENDATIONS

The bibliography would be helpful to teachers. The material on the General Office Clerk is similar to an Occupational Training Plan. This booklet could be helpful to those at new centers who need help in developing materials. The guide would need to be checked against the Training Achievement Record.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Typing: What Matters is How
DATE	July, 1975
NAME OF DEVELOPERS	Erma Evans Bergen County Vocational - Technical Schools

SUBJECT AREA	Clerk Typist BE-276 $3.00
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers University Building 4103-Kilmer Campus, New Brunswick, N.J. 08903

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
X other stapled

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
X subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
X review questions
___ answer key

INTENDED USE

X student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

X line copy
___ photographs
___ charts/graphs
X black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
X low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
X develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

Guide discusses how to type, using illustrations also discussing accuracy, correct body positions, concentration, effectively typing, employment goals, speed and stroking techniques.

COMMENTS AND RECOMMENDATIONS

Could be used as a supplement to regular book for student of very low reading skills.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Vocational Forms Typing 1-15
DATE	1972
NAME OF DEVELOPERS	Merle Woods, Clifford House
SUBJECT AREA	Clerk Typist
ORDER INFORMATION	Gregg Division McGraw - Hill Book Company 07-071585-8

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other tear-off sheets

_X_ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
___ student activities
_X_ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

Vocational Forms Typing 1-15 is designed for typists who can type at least 30 words per minute and know all the parts of the typewriter. The student would be able to work at his/her own pace, and pages are detachable to be inserted into typewriter. There are 15 projects to be completed. At the beginning of each is a group of drills to determine the need for speed or accuracy practice. The projects consist of addressing labels, envelopes, cards, typing invoices of every kind, credit memos, and bills.

COMMENTS AND RECOMMENDATIONS

Would be a good source, allows student to work at his/her own rate and does not require very much instructor supervision (instructor may need to give oral directions for some projects).

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Clerk-Typist	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Automated Instruction		●			Unknown			●			●			●		●			●		
2. BO-GEC/Business and Office Careers Course Guide		●		●			●			●				●			●		●		
3. Applied Office Typewriting		●		●			●				N/A			●			N/A				
4. Office and Business Occupations	●				Unknown			N/A		→									●		
5. Typing: What Matters is How		●		●				●			●			●			●			●	
6. Vocational Forms Typing	●			●			●				N/A			●			N/A		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

COOK

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Foods - A Teacher's Guide to an Employment Orientation Course for Special Needs Students

DATE: 1976

NAME OF DEVELOPERS:
Francine Grubb
Joseph English

SUBJECT AREA: Food Preparation and Service

ORDER INFORMATION:
Vocational - Technical Curriculum Laboratory
Rutgers University Building, 4103 Kilmer Campus $5.00
New Brunswick, N.J No. SP388

MATERIAL FORMAT

___ hardbound
___ paper bound
X loose leaf
X other transparency masters

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
X performance objectives
X criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
X teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

n/a large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

n/a ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This is an excellent curriculum guide for the course in cooking. Each lesson has suggested performance objectives, methods of instruction, demonstrations to be performed, student activities and teacher preparation in an outline format. Covers preparation and serving of breads, eggs, desserts, salads, breakfasts, as well as safety rules and equipment use and care.

COMMENTS AND RECOMMENDATIONS

An excellent guide for teachers who need an organizational format for their course. Would recommend as useful, especially for individuals new to the teaching field, but experienced in their subject area.

584

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Food Service
DATE	1971
NAME OF DEVELOPERS	Barbara Furneisen M.H. Katzenbach School for the Deaf West Trenton, N.J.
SUBJECT AREA	Food Service Occupations
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University Building - Kilmer Campus New Brunswick, N.J.

MATERIAL FORMAT

____ hardbound
X paper bound
____ loose leaf
____ other stapled

____ additional budget required for yearly replacement
X materials nonconsumable if separate answer sheet provided
____ subject index
X bibliography/references
____ performance objectives
____ criterion-referenced measures
X student activities
X student work sheets
X review questions
____ answer key

INTENDED USE

X student resource
____ teacher resource
X individual instruction
____ group instruction

ILLUSTRATIONS

X line copy
____ photographs
X charts/graphs
X black & white
____ color

MATERIAL READABILITY

X large print format
____ double column copy
X generous paragraph spacing
X high interest level
X low reading level

FEATURES FOR DISADVANTAGED STUDENTS

____ ethnic groups meaningfully depicted
____ develops self-worth concept
X develops world of work concept
X develops craftsmanship concept

DESCRIPTION	Each unit contains a general objective, information, illustrations, vocabulary, and an assignment (fill-in-the-blank). Units cover safety, general rules, preparing the dining room, kitchen equipment, food portioning, meal service, dessert, salad, and sandwich preparation.
COMMENTS AND RECOMMENDATIONS	This is a very basic text and workbook which would be excellent for use with corpsmembers who are not good readers. It is an excellent reinforcement of hands-on experience.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Food Service: Teacher's Guide
DATE	No date
NAME OF DEVELOPERS	B. K. Furneisen

SUBJECT AREA	Introduction to Cooking
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers University Bldg. 4103 Kilmer Campus New Brunswick, N.J. 08903 $5.75; #FO-67

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other plus masters for transparencies

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

The guide is divided into units which contain lessons. Each lesson contains an objective, key points, and suggested class activities.

COMMENTS AND RECOMMENDATIONS

An excellent instructor's guide. Sequences tasks; covers pertinent information. The instructor would need to prepare materials for use with students, but the guide gives a complete course outline.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Sue Learns About the Use of Measurements in Cooking
DATE	1971
NAME OF DEVELOPERS	Carol Shenk

SUBJECT AREA	Baking, Cooking
ORDER INFORMATION	Frank E. Richards PubT. Co. Phoenix, N.Y. 13135

MATERIAL FORMAT

____ hardbound
__X__ paper bound
____ loose leaf
____ other ____________________
____

__X__ additional budget required for yearly replacement
____ materials nonconsumable if separate answer sheet provided
____ subject index
____ bibliography/references
____ performance objectives
____ criterion-referenced measures
__X__ student activities
____ student work sheets
____ review questions
____ answer key

INTENDED USE

__X__ student resource
____ teacher resource
____ individual instruction
____ group instruction

ILLUSTRATIONS

__X__ line copy
____ photographs
__X__ charts/graphs
__X__ black & white
____ color

MATERIAL READABILITY

____ large print format
____ double column copy
____ generous paragraph spacing
____ high interest level
__X__ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
____ develops self-worth concept
____ develops world of work concept
____ develops craftsmanship concept

DESCRIPTION

A self-paced learning package. Contains a pre-test and six lessons on measuring cups, spoons, and measuring fats. Exercises (fill in the blank) are on almost every page.

COMMENTS AND RECOMMENDATIONS

Low reading level. Could be used as a supplement for courses in cooking/baking, to reinforce hands-on experience. At some points, this book "talks down" to students; i.e., contains clauses such as"check with your teacher," etc.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Cook	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Foods - Orientation Course for Special Needs Students	●			●			●				N/A	→	→	→	→	→			●		
2. Food Service	●			●			●			●			●				●		●		
3. Use of Measurements in Cooking		N/A			Unknown		●			●			●				●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

ELECTRICIAN

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Basic Electricity, Parts 1-4
DATE	1977
NAME OF DEVELOPERS	D. C. Kilmer

SUBJECT AREA	Electricity #EY 435; $6.00
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers University, Bldg. 4103 - Kilmer Campus New Brunswick, N.J.

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other Stapled

_X_ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
_X_ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level 5th - 6th (approx.)

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION	Each of the four books is written simply and clearly. Each lesson contains an objective, related vocabulary, and information. Illustrations are plentiful. There are questions and fill-in-the-blank assignments with each lesson.
COMMENTS AND RECOMMENDATIONS	Suitable for beginners. Clear, performance-based text. Good for use with poor readers.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Basic Electricity and Electronics
AC & DC #801, 802
Electrical House Wiring Explained

DATE: 1975

NAME OF DEVELOPERS: Richard Hunter

SUBJECT AREA: Electricity

ORDER INFORMATION: Bergwall Productions
839 Stewart Avenue
Garden City, N.Y. 11530

MATERIAL FORMAT

- ___ hardbound
- ___ paper bound
- ___ loose leaf
- X other Filmstrip and Cassette
- ___ additional budget required for yearly replacement
- ___ materials nonconsumable if separate answer sheet provided
- ___ subject index
- ___ bibliography/references
- ___ performance objectives
- ___ criterion-referenced measures
- ___ student activities
- ___ student work sheets
- ___ review questions
- ___ answer key

INTENDED USE

- X student resource
- ___ teacher resource
- ___ individual instruction
- ___ group instruction

ILLUSTRATIONS

- N/A line copy
- ___ photographs
- ___ charts/graphs
- ___ black & white
- ___ color

MATERIAL READABILITY

- N/A large print format
- ___ double column copy
- ___ generous paragraph spacing
- ___ high interest level
- ___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ___ ethnic groups meaningfully depicted
- ___ develops self-worth concept
- ___ develops world of work concept
- X develops craftsmanship concept

DESCRIPTION

Series of filmstrips with cassettes. Some complex; others simplified. Seen on Superviewer 136. "House Wiring" strips are useful. Written in terms of action and performance. Sequence of steps is stated clearly. Types of diagrams for wiring.

COMMENTS AND RECOMMENDATIONS

Recommend as an aid to electricity students. All strips would be relevant.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Electrical House Wiring Explained
DATE	1975
NAME OF DEVELOPERS	

SUBJECT AREA	Electrician
ORDER INFORMATION	Bergwall Productions No. 803 839 Stewart Ave. $138.00 Garden City, N.Y. 11530

MATERIAL FORMAT

____ hardbound
____ paper bound
____ loose leaf
_X_ other 6 color filmstrips
6 cassettes
study guide
____ additional budget required for yearly replacement
____ materials nonconsumable if separate answer sheet provided
____ subject index
____ bibliography/references
____ performance objectives
____ criterion-referenced measures
____ student activities
____ student work sheets
____ review questions
____ answer key

INTENDED USE

_X_ student resource
____ teacher resource
_X_ individual instruction
____ group instruction

ILLUSTRATIONS

____ line copy
____ photographs
____ charts/graphs
____ black & white
_X_ color

MATERIAL READABILITY

____ large print format
____ double column copy
____ generous paragraph spacing
_X_ high interest level
____ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

____ ethnic groups meaningfully depicted
____ develops self-worth concept
____ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This filmstrip series explains proper installation methods for electrical mechanisms. All techniques shown are based on the National Electrical Code. The first strip shows an electrician's tools and defines terms used in the trade. Other strips include information on wiring techniques, installation of ground fault interrupters and receptacles, installation of switches, and of fuse and circuit breaker panels. Each filmstrip is between 70 and 91 frames, and each cassette is between twelve and sixteen minutes.

COMMENTS AND RECOMMENDATIONS

These filmstrips are very well done. The scripts are written in performance terms and are direct and concise. One problem in using any filmstrip is the enormous amount of information contained on each one. If corpsmembers can operate the projector themselves, and stop at appropriate times, these audio-visuals well be more effective. Otherwise, there is an overload of information to be absorbed.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Residential Electrical Wiring Explained

DATE: 1977

NAME OF DEVELOPERS:

SUBJECT AREA: Electrician

ORDER INFORMATION:

Bergwall Productions
839 Stewart Ave.
Garden City, N.Y. 11530

No. 804 A,B, & C
$365.00
(see description)

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
X other 14 color filmstrips
14 cassettes
study guide
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

X student resource
___ teacher resource
X individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
X color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
X develops craftsmanship concept

DESCRIPTION

This filmstrip series explains electrical wiring of single family homes. No. 804 A, Planning and Roughing In, outlines the steps in estimating, planning, obtaining temporary service roughing in, and installing recessed fixtures. It contains 5 strips and 5 cassettes for $135.00 No. 804B, Finishing the Installation, discusses special purpose outlets, diswashers, etc., small appliance circuits, oil burner wiring, and fixture handing. It contains the same number of materials for the same price. No. 804 C, on Low Voltage and Special Circuits, was unavauable for preview. It contains 4 strips, 4 cassettes, and is $108.00. Each of these three units can be ordered separately.

COMMENTS AND RECOMMENDATIONS

Some of these topics may not be applicable in some regions and for some corpsmembers. The material may be too advanced, i.e., estimating and planning the job. No. 804 B would probably be of the most use as it gives more step-by-step directions. These series could be somewhat useful for corpsmembers.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Electrician	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Basic Electricity, Parts 1-4	●			●			●			●			●				●		●		
2. Basic Electricity and Electronics		N/A						N/A		●				N/A				●		●	
3. Electrical House Wiring Explained		N/A			●			N/A		●			● (High Interest)				●			●	
4. Residential Electrical Wiring		N/A			●			N/A		●				● (Script)				●		●	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

ELECTRICIAL APPLIANCE REPAIRER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Electric Appliance Repair- Instructional Resources
DATE	1973
NAME OF DEVELOPERS	Not available

SUBJECT AREA	Electric Appliances
ORDER INFORMATION	Link Educational Laboratories Montgomery, Ala. 36111

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________
____
____
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
_X_ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

n/a line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

n/a large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

n/a ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION	This pamphlet of 12 pages includes lists of movies, books, filmstrips, and transparencies that can be used to teach this course.
COMMENTS AND RECOMMENDATIONS	No mention is made of materials that would be suitable for slower students, but many of the sources, i.e., Merrill, Hayden, etc., do not lend themselves to use with the disadvantaged. Recommend as somewhat useful.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Refrigeration Service Fundamentals - A Multimedia Program in Four Units
DATE	1977
NAME OF DEVELOPERS	John J. Richards Andrew H. Hagel

SUBJECT AREA	Electrical Appliance Repair
ORDER INFORMATION	DCA Educational Products $210.00 424 Valley Road Warrington, Pa. 18976

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other 12 filmstrips
12 cassettes
study guide
___ additional budget required for yearly replacement
_X_ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
_X_ student activities
_X_ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
_X_ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

These materials are divided into four groups of related topics, with skill development progressing from identification of tools to the task of laying brick to the line. The four groups include information on the following topics; identification of hand tools, mixing and spreading mortar; laying brick (2 parts), and laying block.

A Study Guide is included in the packet, which includes a written script for each tape and a student worksheet. The worksheets contain objectives written in behavioral terms and content questions that ask the student to explain certain procedures.

COMMENTS AND RECOMMENDATIONS

The script is written using performance terminology (insert, place, begin, etc.) and is clear and direct. However, the procedures outlined on most of the filmstrips are detailed and complex. The instructor can use these audio-visual materials as reinforcements of hands-on experience. The filmstrips are designed for individual instruction; thus the instructor could have the corpsmembers use the worksheets as study tools or for quiz purposes.

These materials have more validity than other a/v curricula because performance objectives and a way to measure the learning have been included.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Servicing Electrical Appliances Volumes 1 and 2
DATE	1972
NAME OF DEVELOPERS	National Radio Institute Washington, D.C.
SUBJECT AREA	Electrical Appliance Repairs
ORDER INFORMATION	McGraw - Hill Book Company 07-046128-7 New York, N.Y.

MATERIAL FORMAT

- ☐ hardbound
- ☒ paper bound
- ☐ loose leaf
- ☐ other ____________________
- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumable if separate answer sheet provided
- ☐ subject index
- ☐ bibliography/references
- ☐ performance objectives
- ☐ criterion-referenced measures
- ☐ student activities
- ☐ student work sheets
- ☒ review questions
- ☒ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☒ individual instruction
- ☒ group instruction

ILLUSTRATIONS

- ☒ line copy
- ☒ photographs
- ☐ charts/graphs
- ☒ black & white
- ☐ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☒ high interest level
- ☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☐ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

Volume I covers the fundamentals of electricity and how it is used in heating appliances, reservicing small appliances and fixtures. Servicing electric irons, toasters and coffeemakers, cooking appliances, electric ranges, and electric hot water heaters.

Volume II covers theory, motion-producing appliances and those that operate on the basis of both heat and mechanical motion.

Both volumes discuss tools, special equipment, handling service complaints, test equipment, trouble shooting, and diagnostic testing. The volumes also provide a number of illustrations, schematics, and diagrams.

COMMENTS AND RECOMMENDATIONS

The material would be a good source for electrical appliance reparing. However, content may be difficult or written at an advanced level for lower-level readers. Though the material is intended for student resource purposes, it would provide a good source, as a supplement, to the instructor (for oral discussion, testing, etc.).

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Electrical Appliance Repair	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Electrical Appliance Repair-Instructional Resources		N/A	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	●		
2. Refrigeration Service Fundamentals	●			●			●			●			● (Script)				●		●		
3. Servicing Electrical Appliances		●			●		●			●					●			●			●

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

HEAVY EQUIPMENT REPAIR

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Diesel Engine Services. An Instructor's Guide for a Program in Trade and Technical Education

DATE

NAME OF DEVELOPERS New York State Education Department

SUBJECT AREA Heavy Equipment Repair

ORDER INFORMATION
ERIC Reproduction Service
2020 14th Street, N
Arlington, VA 22201
ED133 426
$8.69

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
_X_ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This instructional guide is designed to prepare students to be engine mechanics working on automotive and large stationary diesel engines. Eight units are included; skills move from simple to complex. Each unit contains behavioral objectives, a content outline, understandings and teaching approaches that can be used to develop content, and review discussion questions. Sample topics covered include: tool identification and use; job safety engine removal, dissassembly and cleaning, problem diagnosis; tune-up procedures; injection systems and controls and engine accessories.

COMMENTS AND RECOMMENDATIONS

This is an excellent curriculum tool. Notes on using a/v materials are included, as well as a directory of diesel engine manufacturers from which other instructional materials are available and a bibliography of texts, reference books, charts, films, filmstrips, slides, and transparencies.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Heavy Equipment Repair	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Diesel Engine Services	●			●			●					●		N/A			N/A		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

KEYPUNCH AND VERIFIER OPERATOR

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Keypunch Training
DATE	November, 1974
NAME OF DEVELOPERS	Raymond F. Pieslak Marie H. Katzenbach School for the Deaf

SUBJECT AREA	Keypunch and Verifier Operator
ORDER INFORMATION	Vocational-Technical Curriculum Laboratory Rutgers University Building 4103-Kilmer Campus, New Brunswick, N.J. $4.75 BE-272

MATERIAL FORMAT

☐ hardbound
☐ paper bound
☐ loose leaf
☒ other stapled

☐ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☐ subject index
☐ bibliography/references
☒ performance objectives
☐ criterion-referenced measures
☐ student activities
☐ student work sheets
☐ review questions
☐ answer key

INTENDED USE

☒ student resource
☐ teacher resource
☒ individual instruction
☐ group instruction

ILLUSTRATIONS

☐ line copy
☒ photographs
☐ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☐ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☒ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

☐ ethnic groups meaningfully depicted
☐ develops self-worth concept
☐ develops world of work concept
☒ develops craftsmanship concept

DESCRIPTION

Manual contains basic fundamentals and applications needed for keypunching. Each unit contains an objective and an assignment. The text is designed to be used with a keypunch machine.

COMMENTS AND RECOMMENDATIONS

Not recommended for low-level readers. Should be used with the assistance of an instructor for better understanding.

600

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Keypunch Operator	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Keypunch Training	●			●			●							●			●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

NURSE'S AIDE

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Being a Nursing Aide
DATE	
NAME OF DEVELOPERS	Hospital Research and Educational Trust

SUBJECT AREA	Nurse's Aide
ORDER INFORMATION	Robert J. Brady Co. Bowie, Maryland 20715 $6.50

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
_X_ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
_X_ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This manual is currently in use at some Job Corps centers. It is divided into chapters, with each containing objectives, related information, suggested activities, and self-tests.

COMMENTS AND RECOMMENDATIONS

This is a good basic text for the Nurse's Aide course. Some material may need to be updated. The instructor will need to modify and add to suggested activities for each chapter.

605

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS -

TITLE OF MATERIALS	Health Assistant	
DATE	1973	
NAME OF DEVELOPERS	Esther Caldwell and Barbara R. Hegner	
SUBJECT AREA	Nurse Aide	
ORDER INFORMATION	Delmar Publishers Albany, N.Y. 12205	0-8273-0336-7 $6.20

MATERIAL FORMAT

- ☐ hardbound
- ☒ paper bound
- ☐ loose leaf
- ☐ other ____________________

- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumabl2 if separate answer sheet provided
- ☐ subject index
- ☐ bibliography/references
- ☒ performance objectives
- ☐ criterion-referenced measures
- ☒ student activities
- ☐ student work sheets
- ☒ review questions
- ☐ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☐ individual instruction
- ☒ group instruction

ILLUSTRATIONS

- ☐ line copy
- ☒ photographs
- ☐ charts/graphs
- ☒ black & white
- ☐ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☒ high interest level
- ☐ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☐ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☒ develops world of work concept
- ☐ develops craftsmanship concept

DESCRIPTION

This manual on Health Assistants discusses the responsibilities, procedures, determining vital signs, communication skills, introduction to medical science, and body systems and disorders. The units include review question and discussion topics. Performance objectives are included. Also included with the Instructor's Guide are lists of texts and related audio-visual aids.

COMMENTS AND RECOMMENDATIONS

This manual is a very good source. However, instructor assistance would be necessary. The teacher could take certain chapters from this source to add to the curriculum. Reading level is approximately seventh grade; only students with fair reading skills could utilize the materials effectively.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Home Nursing
DATE	May 1972
NAME OF DEVELOPERS	Catherine M. Kirtz Marie H. Katzenbach School for the Deaf

SUBJECT AREA	Health Occupations
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University Building - 4103 Kilmer Campus No. HL-71 New Brunswick, N.J. 08903 $5.00

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other stapled

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
_X_ bibliography/references
_X_ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level 7th grade

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
_X_ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

Each unit contains an objective, related information, vocabulary, and an assignment which is usually short answer or fill in the blank. The course is designed to teach the basics of care for the sick, and first aid in accidents and emergencies. It also focuses on basic biology and nutritional needs.

COMMENTS AND RECOMMENDATIONS

This book may be too advanced for some corpsmembers, as the reading level is at seventh grade. There are good illustrations, but the ratio of illustrations to print is not ideal. Instructors could take entire units from this text to add to their own curriculum, however. Recommend as a useful source.

600

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Manual for the Nurse's Aide Teacher Manual included	
DATE	1968	
NAME OF DEVELOPERS	Evelyn L. Knaedler	
SUBJECT AREA	Nurse Aide	
ORDER INFORMATION	Delmar Publishers Albany, N.Y. 12205	ISBN 0-8273-0334-3 $4.20

MATERIAL FORMAT

___ hardbound
X paper bound
___ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
X performance objectives
___ criterion-referenced measures
X student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

X student resource
___ teacher resource
___ individual instruction
X group instruction

ILLUSTRATIONS

___ line copy
X photographs
___ charts/graphs
X black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
X develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

The manual discusses relations and attitudes of the nurse's aide, and presents instructional material on certain procedures necessary for the nurse's aide to learn. Each unit is discussed in two parts, related theory and procedures; written in a non-technical manner, and concludes with suggested activities to develop or test understanding.

COMMENTS AND RECOMMENDATIONS

This manual would be a good source for providing the basic foundation necessary for training nurse's aides. The Instructor's Guide is excellent. It contains basic teaching tips on preparation, implementation, and testing. The manual has been pre-tested, but not with disadvantaged students.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Nursing Aide
DATE	Not Available
NAME OF DEVELOPERS	Hospital Research and Educational Trust

SUBJECT AREA	Nurse's Aide	
ORDER INFORMATION	Robert J. Brady Co. Bowie, Maryland 20715	7 Units - $310.00

MATERIAL FORMAT

- ☐ hardbound
- ☐ paper bound
- ☐ loose leaf
- ☒ other transparencies
- ☐ additional budget required for yearly replacement
- ☐ materials nonconsumable if separate answer sheet provided
- ☐ subject index
- ☐ bibliography/references
- ☐ performance objectives
- ☐ criterion-referenced measures
- ☐ student activities
- ☐ student work sheets
- ☐ review questions
- ☐ answer key

INTENDED USE

- ☒ student resource
- ☐ teacher resource
- ☒ individual instruction
- ☒ group instruction

ILLUSTRATIONS

- ☐ line copy
- ☐ photographs
- ☐ charts/graphs
- ☐ black & white
- ☒ color

MATERIAL READABILITY

- ☐ large print format
- ☐ double column copy
- ☐ generous paragraph spacing
- ☒ high interest level
- ☒ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- ☒ ethnic groups meaningfully depicted
- ☐ develops self-worth concept
- ☐ develops world of work concept
- ☒ develops craftsmanship concept

DESCRIPTION

These sets of transparencies provide basic information on hospital procedure, hygiene, and personal behavior as well as explaining nursing principles and skills. Care of all types of patients, from pediatric to geriatric, is covered.

COMMENTS AND RECOMMENDATIONS

The transparencies are motivational, in that minority students are able to identify with the illustrations. They could be used with small groups of students on the same skill level, or as individual study aids.

Following is a list of units contained in this series:

Unit I	- Introduction and Orientation	$11.00
Unit II	- The Working Environment	$72.00
Unit III	- Lifting & Moving Patients	$63.00
Unit IV	- Personal Care of the Patient	$79.50
Unit V	- Special Procedures - 1	$76.50
Unit VI	- Special Procedures - 2	$81.50
Unit VII	- Anatomy	$49.00

Nurse's Aide	PERFORMANCE OBJECTIVES 1	2	3	COST EFFECT. 1	2	3	SUPPL. ACTIVITIES 1	2	3	ILLUSTR. 1	2	3	READABILITY 1	2	3	FEATURES/ DISADV. 1	2	3	OVERALL USE. 1	2	3
1. Being a Nursing Aide	●			●			●			●				●			●		●		
2. Health Assistant	●			●			●			●				●			●		●		
3. Home Nursing	●			●			●			●				●			●		●		
4. Manual for the Nurse's Aide	●			●			●			●				●			●		●		
5. Nursing Aide Transparencies		N/A			●			N/A		●			●				●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

OFFSET PRESS OPERATOR

610

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS The Basic Offset Press Explained

DATE 1977

NAME OF DEVELOPERS

SUBJECT AREA Offset Press Operator

ORDER INFORMATION
Bergwall Productions No. 305
839 Stewart Ave. $92.00
Garden City, N.Y. 11530

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other 4 color filmstrips
4 cassettes
Study Guide
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This explanation of the offset press includes four parts; inking and cleaning process; paper feeding and related operations; the printing operation, including parallel, vertical and horizontal adjustments; and common operating adjustments and problems.

COMMENTS AND RECOMMENDATIONS

These filmstrips are recommended as a reinforecment of instructor demonstration and hands-on experience. Many process are explained, and students should be able to replay crucial parts of the tapes as they are listening to it. There is too much material to be absorbed otherwise.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Introduction to the Offset Process (#301) and Producing Line Copy for the Offset Process Explained
DATE	1977
NAME OF DEVELOPERS	

SUBJECT AREA	Offset Press Operator	
ORDER INFORMATION	Bergwall Productions 339 Stewart Ave. Garden City, N.Y. 11530	No. 301 - $25.00 No. 302 - $69.00

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
X other color filmstrips
cassettes
study guides
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

X student resource
___ teacher resource
X individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
X color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
X develops craftsmanship concept

DESCRIPTION

A general overview of the offset printing process is given in #301, which contains one filmstrip and one cassette. #302 contains more detail on typesetting equipment, the lock-up process, the platen press process, and the set up and use of the headliner; this series contain 3 filmstrips and cassettes.

COMMENTS AND RECOMMENDATIONS

These materials can be used for reinforcement of basic concepts. The series of frames presents many procedures and processes which the student must learn in detail; the corpsmember must have the opportunity to rewind and play back the cassette and filmstrip when needed.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Offset Press Operator	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. The Basic Offset Press Explained		N/A		●				N/A		●			● (Script)				●		●		
2. Introduction to the Offset Press		N/A		●				N/A		●			● (Script)				●		●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

PAINTER

DESCRIPTION

The National Painting, Decorating and Drywall Apprenticeship and Manpower Training Fund provided for the development of these slide programs which are already in use at Job Corps centers.

The "Industrial Maintenance" program contains 116 slides and was developed by the Sherwin-Williams Company. Basic topics covered are corrosion, surface preparation, primers, film thickness and selection of a coating system. The script is simply and clearly written. Students learn to identify conditions and problems.

The "Ladders and Scaffolding" presentation contains 80 slides. It's main focus is on safe and proper use of equipment and materials. It is simple and can be used with beginners in the trade, to orient them to safety hazards and to help install good work habits.

The "Spray Painting" program includes 80 slides, and concentrates on basic spray procedures and techniques, diagnoses and resolution of problems, and the safe handling and storage of materials and equipment.

COMMENTS AND RECOMMENDATIONS

All programs contain numbered scripts. Highly recommend as a learning tool.

EVALUATION SUMMARY

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Painter	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Painting - Slid Presentations **- Industrial Maintenance** **- Ladders and Scaffolding** **- Spray Painting**		●			Unknown			●		●			● (Script)				●		●		

* A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level.

WELDER

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Arc Welding	
DATE		
NAME OF DEVELOPERS	Not Available	
SUBJECT AREA	Welding	
ORDER INFORMATION	DCA Educational Products 424 Valley Rd. Warrington, Pa. 18976	$142.50

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other 53 transparencies

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This set of 53 color transparencies and 25 overlays illustrates basic arc welding techniques and gives information on tools and welding symbols. Some illustrations include the following topics: common types of welding, polarity, color codes, soldering, striking the arc, etc. Illustrations also include common welding problems.

COMMENTS AND RECOMMENDATIONS

These transparencies are well made. Many contain brief sentences outlining processes or steps. The overlays are helpful tools to help students learn terminology. These would be suitable for almost all corpsmembers; those students on a very low reading level would have trouble with the sentences but would benefit by the illustrations. The instructor could use these with a group as a reinforcement of hands-on experience, or students could study the transparencies individually if having trouble with a particular process.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Electric Welding

DATE Rev. 1976

NAME OF DEVELOPERS

SUBJECT AREA Welding

ORDER INFORMATION
Media Fair, Inc.
380 Maple Avenue W.
Vienna, Virginia 22180

MATERIAL FORMAT

___ hardbound
___ paper bound
___ loose leaf
_X_ other filmstrips and cassettes
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
_X_ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

This series of filmstrips covers basic electric welding processes. Topics covered include MIG and TIG and stick welding processes, resistance welding, and shielded metal-arc pipe welding.

COMMENTS AND RECOMMENDATIONS

These filmstrips are recommended for secondary and college level adult vocational students. This is an excellent series; however, many of the filmstrips would be too difficult for a majority of corpsmembers.

Two of the introductory filmstrips, "Electric Arc Welding and Cutting" and "Electric Arc Welding Vocabulary" reinforce basic terminology and basic information, and could be helpful as an individual learning device for corpsmembers who may be having difficulty in remembering all of the terms at once.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Elementary Arc Welding Skills/
Elementary TIG Welding Skills

DATE: 1974

NAME OF DEVELOPERS: John Pierson
Charles Jochem

SUBJECT AREA: Welding

ORDER INFORMATION: Vocational - Technical Curriculum Laboratory
Rutgers University Bldg., 4103 Kilmer Campus
New Brunswick, N.J.
$2.75 each

MATERIAL FORMAT

___ hardbound
X paper bound
___ loose leaf
___ other stapled

___ additional budget required for yearly replacement
X materials nonconsumable if separate answer sheet provided
___ subject index
X bibliography/references
___ performance objectives
___ criterion-referenced measures
X student activities
X student work sheets
X review questions
___ answer key

INTENDED USE

X student resource
___ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

X line copy
___ photographs
X charts/graphs
X black & white
___ color

MATERIAL READABILITY

X large print format
___ double column copy
X generous paragraph spacing
X high interest level
X low reading level 2nd grade without technical terms

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
X develops craftsmanship concept

DESCRIPTION

This text and workbook was written for deaf students, but it is applicable to students with a low reading level. The amount of text is minimal, yet basic concepts are presented. The majority of the text contains illustrations with captions and some line copy. Topics covered include identifying equipment, welding positions circuits, arc and electric welding basics.

COMMENTS AND RECOMMENDATIONS

Excellent source for corpsmembers with a low reading level. Strongly recommend.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
Welder	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Arc Welding Transparencies		N/A			●			N/A		●			●				●		●		
2. Electric Welding		N/A			Unknown			N/A		●				● (Script)			●				●
3. Elementary Arc Welding Skills		N/A		●			●			●				●			●			●	

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

GENERAL - INSTRUCTOR AID

636

DESCRIPTION

This bibliography contains evaluations of and order information on materials in the following categories: reading, math, survival skills, vocational courses, and instructional resources. All of the items are available for preview through the Center. All of the materials relate to students with special needs. The "instructional resources" section evaluates curriculum guides and aids, diagnostic information, etc., and many teachers might find it helpful.

COMMENTS AND RECOMMENDATIONS

This is an excellent resource for Basic Education, World of Work, and Vocational Training Job Corps instructors. Highly recommended as a resource at each center.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Competency Based Route To Vertical Curriculum Articulation
DATE	1975
NAME OF DEVELOPERS	Dr. Laura Burger Deena Allen James Loebs

SUBJECT AREA	General Instructor Aid	
ORDER INFORMATION	Minnesota Instructional Materials Center 3554 White Bear Lake Ave. White Bear Lake, Minn.	No. 908 $.50

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other pamphlet

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
_X_ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION	This is a small pamphlet which could be used for staff training in developing a competency-based program. It explains the concept of competency-based instruction.
COMMENTS AND RECOMMENDATIONS	Could be useful for staff training. Should be reviewed first.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Handbook for Vocational Instructors Interested in Competency-Based Education
DATE	1974
NAME OF DEVELOPERS	Dr. Laura Burger and Dr. Judith Lambrecht

SUBJECT AREA	General - Instructor Aids
ORDER INFORMATION	Minnesota Instructional Materials Center 3300 Century Avenue North, White Bear Lake, Minnesota 55110

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other ____________________
____
____
___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This handbook helps vocational instructors develop valid performance based programs. Explains task inventories, gives information to help instructors decide which tasks are to be taught, how tasks are developed into modules, and contains guidelines on writing modules.

COMMENTS AND RECOMMENDATIONS

Excellent resource for new and experienced vocational training teachers. A real aid to vocational staff.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Performance Based Instruction Curriculum Development in Vocational Education. The State of the Art.
DATE	June 1975
NAME OF DEVELOPERS	Alabama State Department of Education
SUBJECT AREA	General - Instructor Aid
ORDER INFORMATION	ERIC Document Reproduction Service 2020 14th Street N. #ED 137 497 Arlington, Virginia 22201 $3.50

MATERIAL FORMAT

___ hardbound
X paper bound
___ loose leaf
___ other ___________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
X subject index
X bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
X teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

N/A line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This review includes several articles on topics having major impact on vocational education programs. Some of the major research efforts in curriculum development are discussed, as well as the causes behind the changes in curricula. Major topics discussed are the development of performance/competency based education, the development of V-TECS, and the National Network for Curriculum Coordination in Vocational-Technical Education.

COMMENTS AND RECOMMENDATIONS

This is an excellent reference tool for instructors and managers who want to keep abreast of changes and developments in the field.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: Residential Construction/
Task Inventories and Strategies for Curriculum

DATE:

NAME OF DEVELOPERS:
W.L. Ashley
T.L. Hindes
F.L. Justice

SUBJECT AREA:

ORDER INFORMATION:
Instructional Materials Laboratory
1885 Neil Avenue
Columbus, Ohio 43210

MATERIAL FORMAT

___ hardbound
X paper bound
___ loose leaf
___ other ______________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
X subject index
X bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
X teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

This guide is a curriculum research tool for instructors and program designers. It contains detailed information on the following: developing task lists and a survey or a task inventory, developing a strategy for task analysis, developing performance objectives from task statements, and developing the scope and sequence of an entire course

COMMENTS AND RECOMMENDATIONS

This is an excellent reference tool and could be used as a guide for in-service training for instructors. It would also be an excellent document for individuals who are reviewing and evaluating materials as well as designing them. The title, "Residential Construction," is a misnomer. Construction is used as an example of the process being explained.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Resource Guide for Performance-Based Instruction
DATE	1977
NAME OF DEVELOPERS	Gerald F. Day and Dennis R. Herschbach, Project Directors

SUBJECT AREA	General-Multiple Listing
ORDER INFORMATION	Vocational Curriculum Research and Development Center Department of Industrial Education - J.M. Patterson Building, University of Maryland, College Park, Md. 20740

MATERIAL FORMAT

- ____ hardbound
- X paper bound
- ____ loose leaf
- ____ other ____________________

____

- ____ additional budget required for yearly replacement
- ____ materials nonconsumable if separate answer sheet provided
- ____ subject index
- X bibliography/references
- ____ performance objectives
- ____ criterion-referenced measures
- ____ student activities
- ____ student work sheets
- ____ review questions
- ____ answer key

INTENDED USE

- ____ student resource
- X teacher resource
- ____ individual instruction
- ____ group instruction

ILLUSTRATIONS

- N/A line copy
- ____ photographs
- ____ charts/graphs
- ____ black & white
- ____ color

MATERIAL READABILITY

- N/A large print format
- ____ double column copy
- ____ generous paragraph spacing
- ____ high interest level
- ____ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

- N/A ethnic groups meaningfully depicte
- ____ develops self-worth concept
- ____ develops world of work concept
- ____ develops craftsmanship concept

DESCRIPTION

This resource guide is an excellent informational source for teachers and contractors. The major portion of the guide contains listings and printed and audio-visual materials that include a short description of the materials, the current cost, and order information.

The guide also includes a section describing how to develop a performance-based instructional program and a list of general resources in the area of curriculum development.

COMMENTS AND RECOMMENDATIONS

These resource guides are invaluable to the instructor in the specific vocational training area. They contain a complete bibliography in that particular subject, and they are recent. However, these guides were not developed specifically as research on programs for disadvantaged youth with a low reading level. But from the instructor's knowledge of the field, he can choose to preview those materials most suited to Job Corp's needs.

Resource guides available from the University of Maryland include the following:

Auto Body
Auto Mechanics
Carpentry
Cosmetology
Electricity/Electronics
Machine Shop
Masonry
Graphic Arts
Welding
Word Processing

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Trade and Industrial Education Service: Techniques of Developing Trade Skills in Students

DATE Not Available

NAME OF DEVELOPERS Division of Vocational Education, State Department of Education, Columbus, Ohio

SUBJECT AREA General - Instructor Aid

ORDER INFORMATION Instructional Materials Laboratory, Trade and Industrial Education - Ohio State Univ. - 1885 Neil Ave.
Columbus, Ohio 43210

MATERIAL FORMAT

____ hardbound
X paper bound
____ loose leaf
____ other stapled

____ additional budget required for yearly replacement
____ materials nonconsumable if separate answer sheet provided
____ subject index
X bibliography/references
____ performance objectives
____ criterion-referenced measures
____ student activities
____ student work sheets
____ review questions
____ answer key

INTENDED USE

____ student resource
X teacher resource
____ individual instruction
____ group instruction

ILLUSTRATIONS

N/A line copy
____ photographs
____ charts/graphs
____ black & white
____ color

MATERIAL READABILITY

N/A large print format
____ double column copy
____ generous paragraph spacing
____ high interest level
____ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
____ develops self-worth concept
____ develops world of work concept
____ develops craftsmanship concept

DESCRIPTION

This booklet contains suggestions for effective teaching of trade skills. It includes references and a study/discussion guide on preparation of the group and methods of implementation.

COMMENTS AND RECOMMENDATIONS

This pamphlet would be useful as an aid in center staff training.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Vocational Instructional Materials for Students with Special Needs
DATE	August 1972
NAME OF DEVELOPERS	

SUBJECT AREA	
ORDER INFORMATION	Northwest Regional Educational Laboratory 700 Lindsay Building 710 S.W. Second Avenue Portland, Oregon 97204

MATERIAL FORMAT

X hardbound
____ paper bound
____ loose leaf
____ other ____________________
____
____
____ additional budget required for yearly replacement
____ materials nonconsumable if separate answer sheet provided
X subject index
X bibliography/references
____ performance objectives
____ criterion-referenced measures
____ student activities
____ student work sheets
____ review questions
____ answer key

INTENDED USE

____ student resource
X teacher resource
____ individual instruction
____ group instruction

ILLUSTRATIONS

N/A line copy
____ photographs
____ charts/graphs
____ black & white
____ color

MATERIAL READABILITY

N/A large print format
____ double column copy
____ generous paragraph spacing
____ high interest level
____ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
____ develops self-worth concept
____ develops world of work concept
____ develops craftsmanship concept

DESCRIPTION

Funds were provided for this study by the U.S. Office of Education. This is a 250 page annotated bibliography containing materials suitable for use with special needs students - handicapped, disadvantaged, etc. Information is on a computer printout format, and includes title, author, corporate author, subject area, media, short comment, and source of material. The Job Corps Occupational Training Guides are included as references. Many of the items include those put out by state departments of education.

COMMENTS AND RECOMMENDATIONS

This is an excellent reference tool, although it is somewhat dated. The book could be of much use to Job Corps staff because all items in it are suitable for use with learners having special needs, unlike most bibliographies of curriculum materials.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS A Catalog of Performance Objectives, Criterion-Referenced Measures and Performance Guides (V-TECS)

DATE 1977

NAME OF DEVELOPERS Not Available

SUBJECT AREA Multiple - See listing under "General - Instructor Aid" category in bibliography

ORDER INFORMATION Available from Western Md. Resource Center
P. O. Box 5448, McMullen Highway, Cresaptown, Md. 21502

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

V-TECS (Vocational-Technical Education Consortium of States) is a cooperative effort to develop catalogs of performance objectives, criterion-referenced measures, and performance guides in selected areas of occupational training.

COMMENTS AND RECOMMENDATIONS

These materials have been developed with extensive field research; all have been field tested prior to publication. Researchers studied tasks needed and used on the job and compared this list to available literature. Included are the duty, task, performance objectives, criterion referenced measures (exercises based on the objectives which serve as a basis for evaluating performance) and performance guides (tasks). These guides can be obtained for a reasonable price and will be helpful in setting up and running a program. Highly recommend.

V-TECS materials are available in the following areas:

Auto Body Repair	21 VT - 17.0301
Auto Mechanics	21 VT - 17.0302
Carpenter	21 VT - 17.1001
Combination Welding	21 VT - 17.2306
Food Management, Production, and Services	21 VT - 09.0203
Nursing Assistance	21 VT - 07.0303
Small Engine Repair	21 VT - 17.31

[illegible]UAT[illegible] SU[illegible]

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
General-Instructor Aid	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Annot. Bibliography/Special Needs Students		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		
2. A Catalog of Performance Objectives...(V-TECS)	●			●				N/A	—	—	—	—	—	—	—	—	—	→	●		
3. Competency-Based Route		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→		●	
4. Handbook for Voc.Ed. Instructors		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		
5. Performance-Based Instruction in Voc. Ed.		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		
6. Residential Construction Task Inventories and Curriculum Strategies	●			●				N/A	—	—	—	—	—	—	—	—	—	→	●		
7. Resource Guide for Performance-Based Instruction		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		
8. Techniques of Developing Trade Skills		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		
9. Vocational Instructional Materials/Special Needs Students		N/A		●				N/A	—	—	—	—	—	—	—	—	—	→	●		

General-Instructor Aid	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Annot. Bibliography/Special Needs Students		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		
2. A Catalog of Performance Objectives...(V-TECS)	●			●				N/A	→	→	→	→	→	→	→	→	→	→	●		
3. Competency-Based Route		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→		●	
4. Handbook for Voc.Ed. Instructors		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		
5. Performance-Based Instruction in Voc. Ed.		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		
6. Residential Construction Task Inventories and Curriculum Strategies	●			●				N/A	→	→	→	→	→	→	→	→	→	→	●		
7. Resource Guide for Performance-Based Instruction		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		
8. Techniques of Developing Trade Skills		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		
9. Vocational Instructional Materials/Special Needs Students		N/A		●				N/A	→	→	→	→	→	→	→	→	→	→	●		

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

GENERAL - MULTIPLE LISTING

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Background for Builders - Related Science and Trade Information for the Building Trades
DATE	1975
NAME OF DEVELOPERS	Joseph Lucas Somerset Vocational - Technical School

SUBJECT AREA	Building Trades/Building Maintenance	
ORDER INFORMATION	Vocational - Technical Curriculum Laboratory Rutgers University Building 4103 Kilmer New Brunswick, N.J. 08903	$5.25 #BU-275

MATERIAL FORMAT

☐ hardbound
☒ paper bound
☐ loose leaf
☐ other ____________________

☐ additional budget required for yearly replacement
☐ materials nonconsumable if separate answer sheet provided
☐ subject index
☐ bibliography/references
☐ performance objectives
☐ criterion-referenced measures
☐ student activities
☐ student work sheets
☒ review questions
☐ answer key

INTENDED USE

☒ student resource
☐ teacher resource
☒ individual instruction
☒ group instruction

ILLUSTRATIONS

☒ line copy
☐ photographs
☐ charts/graphs
☒ black & white
☐ color

MATERIAL READABILITY

☒ large print format
☐ double column copy
☐ generous paragraph spacing
☐ high interest level
☒ low reading level 7th grade

FEATURES FOR DISADVANTAGED STUDENTS

☐ ethnic groups meaningfully depicted
☐ develops self-worth concept
☐ develops world of work concept
☒ develops craftsmanship concept

DESCRIPTION

Units which contain general objectives and related information about aspects of building: blueprints, masonry, plumbing, heating, painting, etc.
The book contains much theory.

COMMENTS AND RECOMMENDATIONS

The information is presented in a humorous manner. However, corpsmembers would not find the book too helpful as it is written in narrative fashion and is not performance-based nor geared to student activity. The instructor might buy one copy as a course supplement for those interested in this related information.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Career-Related Math Units
DATE	1971
NAME OF DEVELOPERS	R. Michalicek, C. Paradis, M. Pierro, A. Grangaard

SUBJECT AREA	Career math
ORDER INFORMATION	Minnesota Instructional Materials Center - 3300 Century Ave., N., White Bear Lake, Minn. 55110

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other ______________________

_X_ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level 7th - 8th

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

A career oriented set of units for high school math. Contains units on construction, electricity, auto mechanics, and office occupations. Does not offer drill on simple problems.

COMMENTS AND RECOMMENDATIONS

These units are somewhat advanced for many corpsmembers. This material could be used as a supplement to the basic math course, or in vocational areas as related instruction.

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS Curriculum Materials

DATE Varies

NAME OF DEVELOPERS Multiple Developers

SUBJECT AREA General - Multiple Listing

ORDER INFORMATION
Associated General Contractors
1957 E Street, N.W.
Washington, D.C. 20006

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other ____________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
_X_ student activities
___ student work sheets
_X_ review questions
_X_ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

These curriculum guides are modular. Performance objectives are included for each major task and for each sub-task. Also included are related content information, work assignment sheets, tests, and test keys, and masters for transparencies.

COMMENTS AND RECOMMENDATIONS

These materials are very well done and will work extremely well with most average students. However, the materials are largely printed materials, and a sixth or seventh grade reading level is necessary. There is a question of how motivational these materials are when used with corpsmembers. A plus is that the materials are designed for individual instruction. Recommend as instructional resources for the instructor and for supplemental use along with hands-on experience. Very useful in helping an instructor organize materials.

Following is a list of content areas in which these materials are available:

- Bricklaying Curriculum
- Commercial Carpentry Curriculum
- Cement Masonry Curriculum
- Construction Craftsman Curriculum

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Glossaries of Key Words
DATE	Not Available
NAME OF DEVELOPERS	Not Available

SUBJECT AREA	General - See following page for listing of areas
ORDER INFORMATION	Vocational Technical Curriculum Laboratory $3.00 each Rutgers University Bldg. 4103 Kilmer Campus New Brunswick, N.J. 08903

MATERIAL FORMAT

___ hardbound
___ paper bound
_X_ loose leaf
___ other _binder_

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

_X_ student resource
_X_ teacher resource
_X_ individual instruction
_X_ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
___ charts/graphs
___ black & white
___ color

MATERIAL READABILITY

___ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
_X_ low reading level 5th grade

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
_X_ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

These glossaries contain key words that are used in the trade. Each word is defined twice - first, it is simply defined and next, used in a sentence. The word is also devided into syllables and capitalized for emphasis.

COMMENTS AND RECOMMENDATIONS

One major drawback to the glossaries is that they contain no illustrations. For that reason, their use will be limited to students reading on a fourth to fifth grade level. The one glossary which did contain illustrations, that for Building Services, is listed separately in this bibliography under the "Building Maintenance" category.

Automobile Body Repair	EN-404
Auto Mechanics	EN-405
Building Trades	EN-406
Food Services	EN-420
Heating/Air Conditioning	EN-422
Total Office Procedures	EN-431
Data Processing	EN-412
Appliance Repair	EN-402
Diesel Power	EN-414
Printing Procedures	EN-428
Radio/TV Repair	EN-429
Welding	EN-432

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Performance Objectives. Basic Course
DATE	1975-76
NAME OF DEVELOPERS	Multiple

SUBJECT AREA	General - Multiple Listing
ORDER INFORMATION	ERIC Document Reproduction Service 2020 14th Street, N Arlington, Virginia 22201

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ______________________

___ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
___ subject index
___ bibliography/references
_X_ performance objectives
_X_ criterion-referenced measures
___ student activities
___ student work sheets
___ review questions
___ answer key

INTENDED USE

___ student resource
_X_ teacher resource
___ individual instruction
___ group instruction

ILLUSTRATIONS

___ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

N/A large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

N/A ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
___ develops craftsmanship concept

DESCRIPTION

These course outlines are divided into sets of major objectives, with each being divided into sequential intermediate performance objectives and related criterion measures. Some tests are included as criterion measures. The course outlines are designed to enable the student to develop competencies in the fundamentals of the particular trade.

COMMENTS AND RECOMMENDATIONS

Much of the material in these manuals will be useful as aids in designing curricula. The performance objectives are clearly written, and the inclusion of learning measures is an added plus. This type of aid could help the new instructor or the instructor at a new center to get started.

Following is a list of content areas for which materials are available:

Building Maintenance	ED 139 963 $2.06
Printing	ED 139 943 $3.50
Welding	ED 139 947 $2.06

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS: "Practical Problems in Mathematics" Series

DATE: 1975-1977

NAME OF DEVELOPERS:

SUBJECT AREA: General-Multiple Listing

ORDER INFORMATION:
Delmar Publishers
50 Wolf Rd.
Albany, N.Y. 12205

MATERIAL FORMAT

___ hardbound
_X_ paper bound
___ loose leaf
___ other ____________________

_X_ additional budget required for yearly replacement
___ materials nonconsumable if separate answer sheet provided
_X_ subject index
___ bibliography/references
___ performance objectives
___ criterion-referenced measures
_X_ student activities
___ student work sheets
___ review questions
_X_ answer key

INTENDED USE

_X_ student resource
___ teacher resource
_X_ individual instruction
___ group instruction

ILLUSTRATIONS

_X_ line copy
___ photographs
_X_ charts/graphs
_X_ black & white
___ color

MATERIAL READABILITY

_X_ large print format
___ double column copy
___ generous paragraph spacing
___ high interest level
___ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

___ ethnic groups meaningfully depicted
___ develops self-worth concept
___ develops world of work concept
_X_ develops craftsmanship concept

DESCRIPTION

Each workbook contains drill and practice in basic computation skills as well as in more advanced mathematical skills used in the particular trade. For example, each book has introductory units on the addition, subtraction, division and multiplication of whole numbers, fractions, and decimal fractions. All of these units contain problems to be encountered in that trade. The latter units contain more specialized knowledge - problems on linear, angular, and surface measurement are used in the welders book, and problems on percents and accounting are used in the office worker's book.

COMMENTS AND RECOMMENDATIONS

These workbooks were designed for use with a wide range of students. They all contain problems relevant to the particular trade. The instructor's guides are excellent; they contain suggested activities for each unit and a series of discussion - provoking questions as well as answer keys. The books are to be used for drill and practice, not for concept formation. They could be used in the Basic Math course or in the vocational course. Following is a list of workbooks available in the "Practice Problems in Math" series:

- Automotive Technicians
- Sheet Metal Technicians
- Electricians
- Printers
- Machinists
- Carpenters
- Masons
- Office Workers
- Welders
- Consumers

INSTRUCTIONAL MATERIALS CHECKLIST
FOR
DISADVANTAGED VOCATIONAL STUDENTS

TITLE OF MATERIALS	Tool Tech Today
DATE	1978
NAME OF DEVELOPERS	Unavailable

SUBJECT AREA	Tool identification and use - applicable to many Job Corps occupational courses
ORDER INFORMATION	MIND, Inc. 181 Main Street, Norwalk, Conn. 06851 Instructional Unit: $345.00

MATERIAL FORMAT

____ hardbound
____ paper bound
____ loose leaf
__X__ other slides with audio tape and related materials
____ additional budget required for yearly replacement
__X__ materials nonconsumable if separate answer sheet provided
____ subject index
____ bibliography/references
__X__ performance objectives
____ criterion-referenced measures
__X__ student activities
__X__ student work sheets
____ review questions
____ answer key

INTENDED USE

__X__ student resource
____ teacher resource
__X__ individual instruction
____ group instruction

ILLUSTRATIONS

____ line copy
____ photographs
____ charts/graphs
____ black & white
__X__ color (slides)

MATERIAL READABILITY

____ large print format
____ double column copy
____ generous paragraph spacing
____ high interest level
__X__ low reading level

FEATURES FOR DISADVANTAGED STUDENTS

____ ethnic groups meaningfully depicted
____ develops self-worth concept
____ develops world of work concept
____ develops craftsmanship concept

DESCRIPTION

Tool Tech is a hands-on training and assessment program on the correct and safe usage of hand tools. The program is designed for the disadvantaged; it is individualized and can be used with virtual non-readers. Tool Tech contains 16 units; each can be ordered individually. Each unit contains assessment and instructional lessons in an audiovisual format. Each unit contains a set of tools. The teacher resource manual is complete; it contains performance objectives and activities also.

COMMENTS AND RECOMMENDATIONS

The slides and tapes are professionally done. An advantage is that students can work individually until they are able to perform the task. The tape stops automatically at points where the student works with the tool. However, the units are not specifically geared to certain trades, but are general in nature. As of 6/12/78, the possibility of developing units for each trade was under investigation. MIND, INC., representatives are in almost every state and will demonstrate this material at centers. Job Corps might want to consider this in order to help determine the value of the program. Unit 6 on Rules, Squares, and Levels is a good resource on measurement. Such a unit could be used the week prior to student entry in a vocational course so that he has an in-depth hands-on orientation to the trade. A disadvantage is the cost.

	PERFORMANCE OBJECTIVES			COST EFFECT.			SUPPL. ACTIVITIES			ILLUSTR.			READABILITY			FEATURES/ DISADV.			OVERALL USE.		
General - Multiple Listing	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1. Background for Builders - Related Information			●		●			●			●			●				●		●	
2. Career-Related Math Units			●		●			●			N/A				●		N/A			●	
3. Curriculum Materials	●			●			●					●		●				●		●	
4. Glossaries of Key Words		N/A		●					●			●		●				●		●	
5. Performance Objectives/Basic Course	●			●				●			N/A			N/A			N/A		●		
6. Practical Problems in Mathematics Series		N/A			●		●			●				●			N/A		●		
7. Tool Tech Today	●					●	●			●			●				●		●		

673

674

*A "1" indicates "excellent" or "very helpful", a "2" indicates a satisfactory level, a "3" indicates "poor" or "not useful."

APPENDIX B

SOURCE LISTING

Airco Technical Institute
121 Kane Street
Baltimore, MD 21224
Contact: Mr. Ronald L. Beall, Director

American Gas Association*
1515 Wilson Boulevard
Arlington, VA
Telephone: 524-2000

American Technical Society*
848 E. 58th Street
Chicago, IL 60637

Associated General Contractors of America
1957 E Street, N.W.
Washington, DC 20036
Contact: Mr. Valentin Riva

Association for Educational Communications and Technology
1126 16th Street, N.W.
Washington, DC 20036

Association of Media Producers*
1707 L Street, N.W.
Washington, DC 20036

Baltimore County Board of Education
6901 North Charles Street
Towson, MD 21204
Contact: Dr. Karl Gettle, Coordinator of Industrial Arts and Vocational Technical Education

Bobbs-Merrill Educational Publishing
4300 West 62nd Street
Indianapolis, IN 46206

California State Department of Education
721 Capitol Mall
Sacramento, CA 95814

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*These associations were not contacted due to time limitations.

Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Columbus, OH 43216

Colorado State University
Curriculum Materials Service
Department of Vocational Education
Vocational Educational Bldg.
Fort Collins, CO 80523

DCA Educational Products
424 Valley Road
Warrington, PA 18976
Contact: Mr. Bennett Schultz, Vice President

Delmar Publishers 1978 Catalog
50 Wolf Road
Albany, NY 12205

East Central Curriculum Management Center
Department of Vocational-Technical Education
100 N. First
Springfield, IL 62777

Florida State University
Center for Educational Technology
1A Tully Gymnasium
Tallahassee, FL 32306
Contact: Dr. Roberto Branson or Dr. Gail Raynet

Frank E. Richards Co.
Phoenix, NY 13135

Frederick County Board of Education
115 East Church Street
Frederick, MD 21701
Contact: Mr. H. Edward Reiley, Supervisor of Vocational Education and
Agriculture

Lincoln Technical Institute
10 Rooney Circle
West Orange, NJ 07052

Maryland State Department of Education
Division of Vo-Tech Education
P.O. Box 8717, BWI Airport
Baltimore, MD 21240

Media Fair, Inc.
380 Maple Avenue W.
Vienna, VA 22180

Montgomery College, Germantown Campus
51 Mannakee Street
Rockville, MD 20850
Contact: Dr. Clifford Rall, Vocational-Technical Education Specialist

Montgomery County Public Schools
850 Hungerford Drive
Rockville, MD 20850
Contact: Dr. Frank Carricato, Director of Career and Vocational Education

Milliken Publishing Co.
1100 Research Boulevard
St. Louis, MO 63132

Minnesota Instructional Materials
3554 White Bear Avenue
White Bear Lake, MN 55110

National Association of Homebuilders
Manpower Division
15th and M Streets, N.W.
Washington, DC 20005
Telephone: (202) 452-0381
Contact: Mr. Sonny Marks and Mr. Tom Gossulin

National Association of Trade and Technical Schools
2021 L Street, N.W.
Washington, DC 20036

International Brotherhood of Painters and Allied Trades
1750 New York Avenue, N.W.
Washington, D.C. 20036
Telephone: 872-1444
Contact: Mr. Ken Dronin

National Audio Visual Association*
3150 Spring Street
Fairfax, VA 22030

National Information Center for Educational Media (NICEM)
"Index to Vocational and Technical Education"
University of Southern California
University Park
Los Angeles, CA 90007

Northwest Regional Education Laboratory for Students with Special Needs
700 Lindsay Building
710 S.W. Second Avenue
Portland, OR 97204

New-Jersey Vocational-Technical Curriculum Laboratory
Rutgers University
4103 Kilmer Campus
New Brunswick, NJ 08903

Ohio State University
Center for Resources in Vocational Education
1960 Kenny Road
Columbus, OH 43210

Ohio State University
Instructional Materials Laboratory
1885 Neil Avenue
Columbus, OH 43210
Contact: Mr. Mark D. Marquette

Oklahoma State Department of Vocational and Technical Education
Curriculum and Instructional Materials Center
1515 West Sixth Avenue
Stillwater, OK 74074

Portland Job Corps Center
1022 S.W. Salmon Street
Portland, OR 97205
Contact: Dr. Dave Fretwell, Deputy Center Director

Prince George County Board of Education
Upper Marlboro, MD 20870
Contact: Mr. Robert L. Brewrink, Supervisor of Trades and Industry, Agriculture/Horticulture, and Health Occupations

Robert J. Brady Co.
Bowie, MD 20715

Science Research Association, Inc.
259 East Eric Street
Chicago, IL 60611

Sears Roebuck, Inc*
Sears Tower
Chicago, IL

The Stanley Works
New Britain, CT 06050
Contact: Mr. Bob Stanley

Steck-Vaughn Co.
807 Brazos
P.O. Box 2028
Austin, TX 78768

Triangle Institute of Technology
635-637 Smithfield Street
Pittsburg, PA 15222

U.S. Department of the Army
Training Developments Institute
Ft. Monroe, VA 23651
Contact: Col. Frank A. Harb, Director

U.S. Army Military Personnel Center
200 Stovall Street
Alexandria, VA 22332

U.S. Army Military Personnel Center
Military Occupational Research Division
2461 Eisenhower Avenue
Alexandria, VA 22331

U.S. Army Training Development Institute
Fort Monroe, VA 23651
Contact: Col. Frank Hart, Director

U.S. Department of Health, Education, and Welfare
Office of Education
Division of Vocational and Technical Education
Washington, DC 20202

U.S. Government Printing Office
Superintendent of Documents
Washington, DC 20402

University of Georgia
Division of Vocational Education
124 Fain Hall
Athens, GA 30602

University of Texas
Industrial Materials Development
Division of Extension
Main Building 2400
Instructional Materials Center
Austin, TX 78712

Vocational-Technical Education Consortium of States
795 Peachtree Street, N.E.
Atlanta, GA 30308

Western House Learning Press
1460 Westinghouse Building
Gateway Center
Pittsburgh, PA 15222

Western Maryland Vocational Resource Center
P.O. Box 5448, McMullen Highway
Cresaptown, MD 21502

Westinghouse Learning Corporation
2400 Ardmore Boulevard
Pittsburgh, PA 15221

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